# ELECTRIC REFRIGERATION NEWS

**The business newspaper of the electric refrigeration industry**

VOL. I. NO. 1 — DETROIT, MICHIGAN, SEPTEMBER 11, 1926 — PRICE FIVE CENTS


## National Educational Plan Approved by Electrical Leaders

### Broad Program Co-ordinating Local and National Effort Enthusiastically Endorsed at League Conference

Two hundred fifty men and women, representing all branches of the electrical industry attending "Camp Co-operation," the sixth annual conference of local electrical leagues with the Society for Electrical Development, held on Association Island in Lake Ontario off Henderson Harbor, N. Y., September 3, adopted a program which is destined to make another important contribution to American business history and electrical progress.

The plan which has been prepared after months of study by the Society for Electrical Development in co-operation with 140 Electrical Leagues in various cities of the United States and Canada, calls for a continental organization in which 400 or more local co-operative groups will become "chapters" of the society, thereby providing the facilities for carrying out a five-year market development campaign to educate the public to a fuller appreciation of electricity as "a way to better living."

#### Designed to Make Competition Constructive

The plan has been approved in principle by Thomas A. Edison, Herbert Hoover and executives of the leading public utilities, manufacturers, wholesalers, retailers and contractors. It contemplates no reduction of competition among manufacturers or ditributors, but is designed to make keen competition *con*structive instead of *de*structive.

The anticipated increase in the use of electricity and electric devices is expected to lower costs while increasing the public comfort and convenience. It is aimed to reduce greatly the surprisingly heavy load of drudgery and discomfort that still rests on Americans in spite of the fact that they are making greater use of the benefits of electricity than any other people on earth.

#### American Homes Still Burdened With Drudgery

Dr. Louise Stanley, director of the Bureau of Home Economics in the Department of Agriculture at Washington, declared in an address at the Island that there is more drudgery left in American homes today than most people think and that more electrical labor saving is a crying need. She knows of a home where the only labor saving device is an extra water bucket so that the housewife now makes one trip to the well instead of two. Dr. Stanley said she hopes the new plan will spread electrical education so completely that no more such homes can exist.

The finances for the plan will come from special product promotion funds and from membership fees both national and local, those of each classification being divided on a 50-50 basis. The controlling board and officers of the national group will lay down policies governing advertising programs, educational campaigns and activities of various sorts. Particular products will have separate support, each one directed nationally under the general plan by a unit of its own. In each chapter-league will be similar boards and officers, and such product units as the chapters may wish to create.

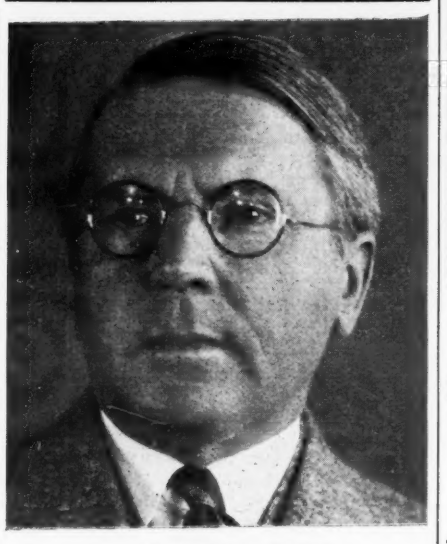
#### Department Stores to be Included in Plan

An important novelty in the big plan is that, for the first time, the electrical industry is linking non-electrical retail distributors, such as department stores which now sell about half of the country's electrical appliances. These stores will be included as members of the chapters along with the local power company and the contractor-dealers who wire houses and sell fixtures and appliances.

#### Electrical Refrigeration Publicity Has Shown Possibilities of Co-operation

Part of this plan for co-operation is already in operation through the Society for Electrical Development, whose headquarters are at 522 Fifth Ave., New York City. An educational campaign devoted to electric refrigeration has been in active progress for six months and has given millions of people information about the new way of protecting food. In the "Red Seal Plan" of adequate house wiring to insure the convenient use of electricity in the home, the society and co-operating leagues have an example of one activity among the many which may be encompassed in the national market development plan.

(Continued on page 2, column 2)



**J. ROBERT CROUSE**
*President*, Nizer Corporation

Mr. Crouse, founder and a life member of The Society for Electrical Development, is the sponsoring director of the Electric Refrigeration Program. He has been a leading spirit in co-operative movements in the electrical and other industries for many years. Mr. Crouse's work in promoting the organization of the Electric Refrigeration Council was publicly recognized at a dinner given by the Sponsoring Committee of the James H. McGraw Awards, at the Waldorf-Astoria Hotel, February 28, 1926. At this dinner Mr. Crouse was presented with the "Medal for Co-operation," he being the first to receive this honor.

**Editorial Aims of Electric Refrigeration News**

- To encourage the development of the art.
- To promote ethical practices in the business.
- To foster friendly relations throughout the industry.
- To provide a clearing house for new methods and ideas.
- To broadcast the technical commercial and personal news of the field.

## EDISON IMPRESSED

### Expresses High Opinion of Electric Refrigeration Program in a Telegram

Orange, N. J., Sept. 3

J. Robert Crouse,
Association Island.
Dear Mr. Crouse:

Your letter of August 26 together with the Waldenwoods pamphlet and the special electric refrigeration reports from the S.E.D. have been brought to my attention by Mr. Meadowcroft and I have read same with a great deal of interest (stop) I am deeply impressed with the Society's advertising on electric refrigeration (stop) It has been placed upon the high plane it deserves and is another manifestation of the wisdom displayed in the founding and continuance of the S.E.D. (stop) Its fundamental keynote, co-operation, has justified itself in results so far and the prospect stretches out to infinity (stop) Please extend a cordial greeting from me to the electrical men gathered at your meeting With all good wishes I remain very truly yours

Thomas A. Edison

In reply to Mr. Edison's telegram the following message was wired:

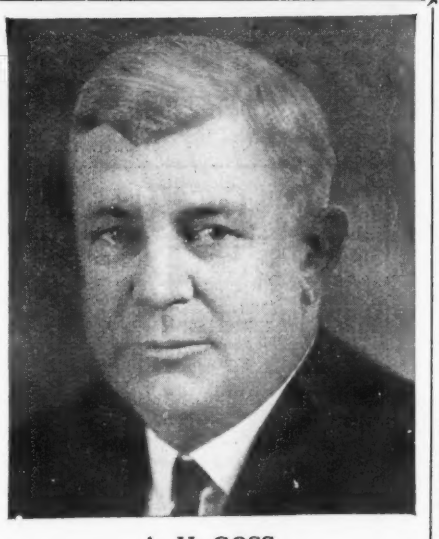
"Thomas A. Edison,
Orange, New Jersey.

Three hundred electrical men representing both national and local elements of all branches of electrical industry embarking upon an all embracing plan of public education in the service of electricity along ideas which you helped to conceive fifteen years ago, and in which you yesterday reaffirmed your belief. Thank you for the inspiration of your message. They wish you many more years of service in lightening the labor of the home and increasing the happiness of mankind. For the society for electrical development and 140 local leagues in United States and Canada.

J. Robert Crouse."

## Electric Refrigeration Council Meets Again at Waldenwoods

### Industry Association Returns to Place of Birth To Perfect Organization and Consider Cooperative Plans



**A. H. GOSS**
**President, The Electric Refrigeration Corporation and Host at Waldenwoods, where the members of the Electric Refrigeration Council are guests of the Kelvinator Corporation.**

Six of the leading manufacturers of electric refrigerators, now co-operating in a publicity and advertising program being handled by the Society for Electrical Development, are meeting at Waldenwoods, near Hartland, Michigan, Friday, Saturday and Sunday, Sept. 10-12, to consider an extension of the present program and to perfect their trade association, the Electric Refrigeration Council, which was organized on a tentative basis at the Westchester-Biltmore Country Club, Rye, N. Y. in January.

This is the fourth meeting of the group which now includes the Kelvinator and Nizer divisions of the Electric Refrigeration Corporation, General Electric Co., Servel Corp., Copeland Products, Inc., and Delco-Light Co., (Frigidaire). The first meeting held at Waldenwoods in the spring of 1925 was called by J. Robert Crouse, president of the Nizer Corp. with the main objective of promoting personal acquaintship and friendly relations among the executives and department heads of the competing manufacturers. It was attended by representatives of the Nizer, Kelvinator, Servel and Frigidaire companies.

The second meeting was held in the fall of 1925 at Delco Dells, near Dayton, Ohio, where E. G. Biechler, president of the Delco-Light Co., was host to the visitors. At this meeting the General Electric Co. was also represented.

In January, 1926, the third meeting was held at the Westchester-Biltmore Country Club, Rye, N. Y. H. G. Scott, chairman of the board of the Servel Corp. was host on this occasion. Copeland Products, Inc. joined the group at this time.

At the meeting now in session, A. H. Goss, president of the Electric Refrigeration Corp. will preside on behalf of the Kelvinator Division. The Westinghouse Elec. & Mfg. Co. has been invited to participate in the activities and will be represented by S. L. Nicholson, acting vice-president and E. B. Mallory, manager of the electric refrigeration division.

The program of the meeting appears on page 3.

## Society for Electrical Development to Present Enlarged Program

### Plan Calls for Organizing Local Groups in the Eighty-one Principal Cities.

J. Robert Crouse, speaking on the local co-operation in electric refrigeration selling, at Camp Co-operation, outlined the proposed advertising and publicity plan which will be presented to the electric refrigeration manufacturers at Waldenwoods:

"This organized co-operative market development, added to the competitive work of all the different distributors, in my judgment represents a new tool for market development which dollar for dollar of both competitive and co-operative expense means a net gain in sales efficiency, faster education of the public, larger sales, more profits, and the elimination of certain sorts of competitive friction and waste which results in no benefit either to the public or to the manufacturers.

"Organized co-operative market development by the local distributors in Cleveland was begun about the first of this year, and I am informed by Mr. J. E. North, their chairman, that on the basis of results furnished him by the distributors, there was sold during the first seven months of 1925 by the three distributors who were the only ones in business the entire year, $451,426.00. Nine distributors reporting for the corresponding seven months of 1926 reported sales of $985,692.00—an increase of 111%.

#### Cleveland Results May Be Duplicated in 81 Cities

"What has been done in Cleveland can be duplicated at least within two years in the other eighty-one cities of one hundred thousand population or more in the United States, and local organization could be carried on down to the cities of smaller population if later advisable.

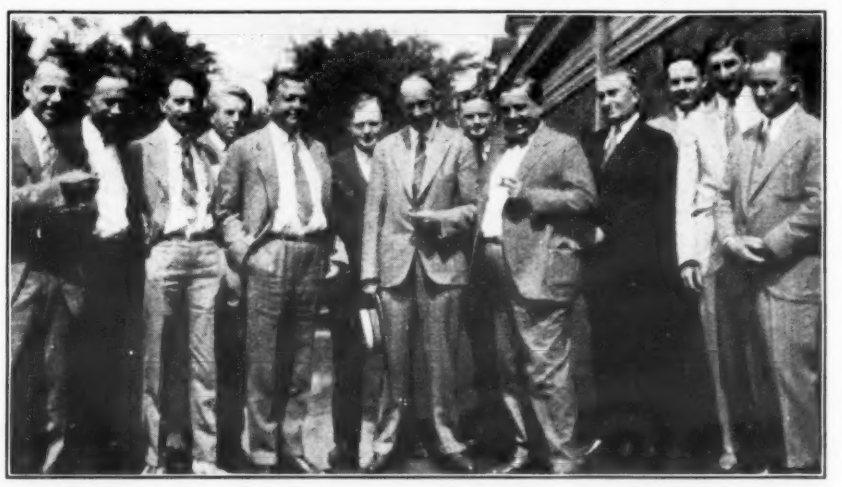
"I do not quote the results in Cleveland as being anything startling, and do not know whether they are above or below the average, for a co-operative campaign such as is here set up has as its object the proper education of the public to the idea of electric refrigeration as the favorable back-ground for the individual competitive sale, and it is not in its nature a nine months' or a year's campaign but one which should be consistently and continuously prosecuted along with competitive selling.

"This program is proposed as the big constructive undertaking for the electrical refrigeration manufacturers for the balance of this year and the year 1927.

#### Will Urge Increased National Advertising in 1927

Referring to the manufacturers part in the cooperative program, he said: "The second definite activity for 1927 in my judgment should be a thirteen cycle full colored page spread in the *Saturday Evening Post* over the signature of the Society for Electrical Development, containing the present series which expires in Decem-

(Continued on page 2, column 4)



**ADVERTISING COMMITTEE at Niagara Falls, Ontario, Canada, after recent meeting with members of the S. E. D. Staff. (left to right) C. W. Brooke, F. M. Cockrell, Gordon Muir, J. Robert Crouse, F. M. Feiker, Geo. Moister, C. W. Hadden, W. L. Dempsey, F. E. Hazard, T. J. McManis, R. A. Donnelly, E. D. Doty and H. W. Foulds.**

### Couzens Ice Machine Company Dissolved; Blame Time Payments

After incorporating with a capitalization of $1,000,000 and having taken over the Superior Electric Refrigerator Company of Lima, Ohio, with plans to manufacture and sell household machines on a large scale, the Couzens Ice Machine Company, Detroit, has announced that it would abandon the business.

The reason given by Senator Couzens, President and chief stockholder of the corporation, was that in his opinion the manufacture and distribution of electrical refrigerators seemed bound up with the instalment or deferred payment method of selling. This he stated he believed to be economically unsound.

Refusing to "emulate the methods of his competitors" and failing to "see a future for an industry whose products must be distributed on a credit basis" Senator Couzens voted to dissolve the corporation.

## *JOINS LAMSON*

### *Harry W. Alexander is Appointed as General Manager*

Harry W. Alexander, well known in the electrical industry, has been appointed general manager, Refrigerator Division of The Lamson Company, Syracuse, New York. This company, large manufacturer of department store, industrial and bank cash and conveyor equipment, makes the "Ice Maid" unit. Mr. Alexander retains his position as advisor to the Reol Refrigerator Company and Ottenheimer Brothers, Inc., Baltimore, refrigerated case and cabinet manufacturers. He will continue inactive as vice-president of The Edsa Manufacturing Co., gas and water heaters, New York, and vice-president and treasurer of the Sherwin Cody Business Ability Institute, New York, with which companies he has long been identified. Mr. Alexander was for several years Sales Manager of the Federal Light and Traction Company, and later, sales and publicity manager of The Society for Electrical Development, and in charge of sales and development of the American Writing Paper Company, Holyoke, Mass. For the past few years he has conducted a personalized service organization along sales and financing line.

### Alex Dow to Address Electric Refrigerator Manufacturers

Alex Dow, president of the Detroit Edison Company, foremost among the public utility executives of the country, will be the principal speaker at the meeting of the Electric Refrigeration Council, at Waldenwoods, Michigan. He will address the gathering at the morning session on Sunday, September 12th.

# WHAT LOCAL ORGANIZED EFFORT WILL ACCOMPLISH

### A Message to Electric Refrigeration Distributors and Branch Office Managers

"You are faced with the problem of selling the public a new device and service—Electric Refrigeration. Your sales resistance consists of competition of at least three kinds:

(1) Other dealers and other makes of electric refrigerators.

(2) Public lethargy and inertia.

(3) The competition of hundreds of other devices and services, all of which are campaigning to secure the public's dollar. (Look over the advertisements in to-day's newspaper to get a measure of this competition.)

"In this bedlam of competitive markets, one individual or one concern can change conditions very little when acting alone. But you can join with your competing distributors and branch office managers, your electric light and power company, your local electric league, and by organized effort amplify and broadcast the message of electric refrigeration with a force and energy that will drive the *idea* of electric refrigeration home, thru and over this competitive market bedlam.

"This method of market attack thru the team work of everyone interested is comparatively new. Its freshness of appeal commends it at once to public attention, satiated these many years with well worn competitive methods and appeal—necessary as they are.

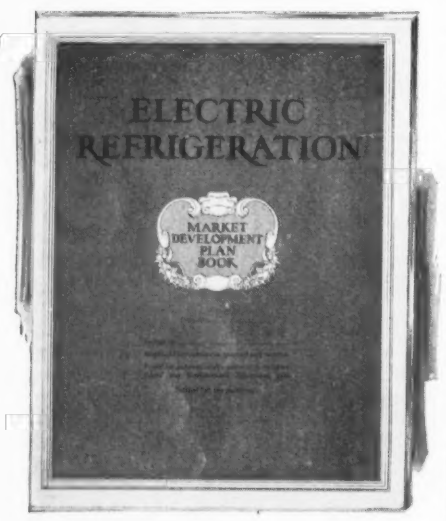
"Organize locally, to pull together, to do practical team work, and sell the public through this new approach, the basic idea and service of electric refrigeration—"To Protect Food is to Protect Life."

"Get together in a spirit of good sportsmanship to meet your common problem. Then go out and compete aggressively to sell your particular product. You will find that the co-operative work has already paved the way for the sale by creating an interest and confidence in the art of electric refrigeration.

"Electric Refrigeration is a new serice, important alike to the manufacturer, branch office, distributor, dealer, central station, league, and the public. It is worthy of the most complete co-operative effort. It has already been demonstrated that mass attack educates the public more quickly, makes more sales, and results in a lower sales expense, simply because it is a more efficient method.

"A little vision, a little faith in the other fellow, and a little courage will release this new selling force for the benefit of yourself and everyone in the business." —*Plan Book*

# PLAN BOOK




**Electric Refrigeration Market Development Plan Book**

A limited edition of the Plan Book has been printed for purposes of discussion, at Association Island and Waldenwoods. It is divided into five sections as follows:

SECTION I. How to organize a local co-operative Electric Refrigeration Program.

SECTION II. The $15,000 program to create a greater demand for electric refrigeration in Cleveland.

SECTION III. Advertising and publicity material offered by the Society for local use.

SECTION IV. The $100,000 National Co-operative Electric Refrigeration Program.

SECTION V. Views of leaders in the industry; constructive policies established and related co-operative activities affecting the market for Electric Refrigeration.

## *Members of the Electric Refrigeration Executive Committee Who Sponsored the Co-operative Advertising Program*

**H. G. SCOTT**

**President, Servel Corporation and member of the Electric Refrigeration Council Executive Committee.**

**W. ROBERT WILSON**

**President, Copeland Products, Inc. and member of the Electric Refrigeration Council Executive Committee.**

**A. W. BERRESFORD**

**Executive Vice-President, Nizer Corp. and member of the Electric Refrigeration Council Executive Committee.**

**E. G. BIECHLER**

**President, Delco-Light Co., who was elected first chairman of the Electric Refrigeration Council at the organization meeting, January, 1926.**

# VISION OF FUTURE

### Address of 13 Years Ago on Value of Unified Effort is Recalled

In his address at the flag-raising ceremony at the opening of Camp Co-operations VI, Mr. Crouse quoted from his address at the Founding of the Society for Electrical Development, Association Island, 1913.

"This Society and the leagues, create the organization and the fund through which some of our dollars can co-operate with the good will of us all in broad effective activity for the expansion of the market, while we continue with the most of our dollars to compete for our fair share.

"This plan means real progross in the direction of more efficient distribution of electrical service through joint cultivation of our common market—the great preoccupied, incredulous, money-spending public—a result which our present systems neither accomplish nor promise ever to achieve on the old lines.

"The plan presents a new kind of consolidation for sales efficiency through a better balance of competitive and co-operative effort to which the popular thought will not now nor in the future take exception.

"The plan means that electrical men—identified with this most wonderful of all business—will demonstrate for themselves and by example for others—the true principles which underline progress in more efficient sales distribution, through the creative cultivation of the market. The plan lends dignity to the art of selling—synonymous in the best sense with service—and marks a further point in the age now happily passing, when the selling spirit was symbolized in the economist's expression Caveat Emptor—"Let the buyer beware."

# NATIONAL EDUCATIONAL PLAN APPROVED

### Influential Educational Men Back of Movement

(Continued from page 1, column 1)

Men representing many influential factors in the industry have declared themselves and their companies for the plan. Among these are S. L. Nicholson, vice-president, Westinghouse Electric and Mfg. Co., E. Pittsburgh, Pa.; J. G. Barry vice-president, General Electric Co., Schnectady, N. Y.; Mark Curran, assistant to the vice-president, Graybar Electric Co., New York; P. L. Thompson, publicity manager, Western Electric Co.; J. Robert Crouse, president, Nizer Corporation of Detroit; G. Fred Laube of Rochester, N. Y., president of the National Association of Lighting Equipment Dealers; Louis Gibbs, Assistant head of the Public Relations Bureau, Edison Electric Illuminating Co. of Boston; J. E. North president Electric League of Cleveland, and chairman of the League Council which has been the central organization among the local electrical leagues of the United States; H. A. Brooks of the Potomac Electric Power Co., Washington, D. C.; Roger Gordon of the Blackstone Valley Gas and Electric Co., Pawtucket, R. I.; Earl Whitehorne, representing the McGraw-Hill Publishing Co., New York City; Stanley Dennis, editor of *Electrical Record*, New York; Frank Watts of the *Dry Goods Economist* and *Hardware Age*, New York; Charles L. Edgar, president, Edison Electrical Illuminating Co., Boston, Mass.; W. W. Freeman, president, The Society for Electrical Development and president of the Union Gas and Electric Co., Cincinnati; John Gilchrist, vice-president, Commonwealth Edison Co., Chicago; and R. E. Searle, president Rochester Gas and Electric Co., Rochester, N. Y.

# EDKINS SAYS CHICAGO TRIAL SALES STICK

### Sees Great Opportunity in Commercial Field

E. A. Edkins, general manager of Electric Shops, Commonwealth Edison Co., Chicago, offers Servel electric refrigerators to any reliable customer on the company's lines, on 30 days' trial. Such sales invariably stick, asserts Mr. Edkins, and after the trial period "you cannot pry them loose."

Referring further to the trial policy, he says the experience of the commpany in selling electric refrigerators differs from that with other appliances. In the case of fans and heaters sold on trial, the goods are frequently returned, not because of unsatisfactory service, but because the immediate need for the appliance has passed. Therefore the plan is far less satisfactory than in the case of refrigerators which are needed every day throughout the year.

Mr. Edkins sees a great future for electric refrigerators in the commercial field. The larger units are less liable to service charges, he points out, because the equipment is necessarily more rugged. It is like the difference between a small wrist watch and a clock. Furthermore, in a hotel or restaurant there is usually someone available to make minor adjustments or repairs.

Frequent changes in the design of the household models are the cause of many service problems, Mr. Edkins believes. No machine is fool proof and it is easily possible for a slight change in design, intended to improve performance, to cause new and unforseen trouble. When changes are made he believes the manufacturer should put out a limited number of the new model and observe the results carefully before making shipments to distant points.

The great problem now is to get men who understand the business. Many companies are rushing into the field in an effort to make a lot of money, without being sure that the machine and the sales policy are correct. Mr. Edkins advises a more conservative procedure. Put out a few hundred he says, and be sure they are right, then organize to put out thousands.

# SOCIETY TO PRESENT ENLARGED PROGRAM

### Food Protection—Keynote of Advertising

(Continued from page 1, column 3)

ber. The key-note of this co-operative advertising is the education of the public to the idea of electrical refrigeration and its advantages, around the key-note and slogan, To Protect Food is to Protect Life.

"The third activity which will have to be given attention in organized fashion is the matter of the code requirements throughout the country for the installation of electrical refrigerating machines. These three in brief could well constitute our minimum program to January 1st, 1928.

"They are all definite, fundamental, progressive, and profitable, and either we must proceed in the broad development of the electrical refrigeration art as a disorganized mob, or as an organized group of intelligent manufacturers. In the former case, important constructive plans and policies will go by default; in the other case they may well have intelligent treatment and direction.

#### Old-Time Associations Lacked Definite Objectives

"There is in the minds of many, including myself, a certain reservation as to the old-time, conventional methods of associations which have oftentimes lacked definite objectives and effective work in their accomplishment, but this does not prove that such organized work undertaken on a proper scale and with seriousness cannot produce not only worth-while but outstanding results. We have hit such a note of accomplishment in our plans which should grow from year to year and mark the scale of our operations as a very significant plan both in respect to scope and the vigor with which we prosecute it."

# "Pay Particular Attention to Service," says W. T. Blackwell of New Jersey

Prompt service is extremely important in building electric refrigerator sales, according to W. T. Blackwell of the Public Service Company of New Jersey. One unsatisfactory machine will kill sales in the neighborhood for months to come.

The electric refrigerator is the most nearly ideal of all appliances from the central station viewpoint, he says, but the power company must be prepared to render service when needed. A machine out of commission over Sunday will spoil food—also future sales.

The Public Service Co. of N. J. has sold about 1500 Kelvinators during the past two years. F. D. Pembleton, electric assistant to the vice-president in charge of sales is responsible for electric refrigeration development in the territory covered, which includes 213 towns and cities, 2,500,000 population, and 3,700 square miles. About 600 ice cream cabinets are also in use in this territory.

# CAMP CO-OPERATION BUSINESS PROGRAM

### Electric Refrigeration and Red Seal Wiring Plan Feature Sessions

#### Wednesday, September 1st Morning Under the Elm—Flag Raising

"The Spirit of Camp Co-operation"—Address, J. Robert Crouse.

"Address of Welcome"—W. W. Freeman, *President*, The Society for Electrical Development.

Response—J. E. North, *Chairman*, League Council, *President*, The Electrical League of Cleveland.

Remarks by Francis R. Neagle, *General Counsel*, The Society for Electrical Development.

Remarks by W. L. Goodwin, *Operating Vice-President*, The Society for Electrical Development.

#### Evening—in the Town Hall

"The Directors' Hour." Opportunities for Co-operative Market Development, as seen by the directors of The Society for Electrical Development.

Presentation of League Exhibits—

"Impressions," Walter Drey, *General Manager*, "Forbes" Magazine.

#### Thursday, September 2nd Morning

"The Fourth Arrow"—Norwood Weaver, *Advertising Counselor*.

"Organized Effort to Advance Better Wiring"—H. B. Kirkland, The Society for Electrical Development.

"The Place of the Red Seal Plan in Industry Development"—Stanley A. Dennis, *Editor*, Electrical Record.

"The Red Seal Plan—Its Progress"—B. Badrian, The Society for Electrical Development.

"Local Operation of the Red Seal Plan"—Kenneth A. McIntyre.

Discussion.

"Wiring Installations in Other than Residence Construction"—George W. Bakewell, *Executive Manager*, Electrical League of Colorado.

Discussion.

"Uniform Electrical Ordinance," S. L. Nicholson, National Electrical Manufacturers Association.

Discussion.

#### Evening

"The Old Fashioned Home and the New."—Don C. Seitz, *Director and Associate Editor*, "The Outlook."

"The Woman's Viewpoint"—Dr. Louis Stanley, United States Department of Agriculture.

"The Leagues and Home Service."—Miss Dora Davis, The Electrical League of Cleveland; Miss Helen Smith, Electrical League of Rochester.

Discussion.

#### Friday, September 3rd Morning

"A New Beginning"—P. L. Thomson, *Publicity Manager*, Western Electric Company.

"The Growth of the Co-operative Market Development Idea."

In Materials Handling—Harold J. Payne, The Society for Electrical Development.

In Electrical Refrigeration—J. Robert Crouse, *President*, Nizer Corporation.

"Report of the League Council"—J. E. North, *Chairman* of League Council.

"A program for Co-ordinated Market Development"—W. L. Goodwin, *Operating Vice-President*, The Society for Electrical Development.

Discussion.

#### Evening—in the Town Hall

Round Table Session.

#### Saturday, September 4th Morning

"The Personal Equation"—Earl E. Whitehorne, *Commercial Editor*, Electrical World.

"League Activities in the Industrial Field"—S. C. Hansen, *Secretary*, The Electrical League of Cleveland.

Discussion.

"Industrial Lighting Activity"—W. E. Prosser, *Manager-Secretary*, Electrical League of the Niagara Frontier.

Discussion.

"Sponsoring a Lighting Institute"—Harry E. Dawson, *Secretary*. Electrical League of Rhode Island.

Discussion.

Reports of Special Committees—Resolutions.

"Summing up the League Conference"—W. L. Goodwin.

Adjournment.

# Kelvinator and Nizer Divisions to Invest $5,000,000 in Detroit Plant

A three-story re-inforced concrete factory building, 440 feet by 640 feet, with approximately 600,000 square feet of floor space will be the first unit in a building program calling for an expenditure of $5,000,000 for land, buildings and equipment recently authorized by the Board of Directors of the Electrical Refrigeration Corporation. An administration building 200 feet by 55 feet, four stories high, will also be built at this time. The new factory will be located on Plymouth Road, Detroit, at the junction of the Pere Marquette and Pennsylvania Railroads, and in it will be consolidated the manufacturing operations of the Nizer and Kelvinator Divisions of the corporation. The buildings are to be completed and ready for occupancy February 1st, 1927. The enlarged plant will give the Electric Refrigeration Corporation an annual production capacity of 1,000,000 units, comprising household and commercial electrical refrigerators, ice cream cabinets, milk coolers and ice cabinets.

# Electric Refrigeration Council Waldenwoods, Sept. 10-11-12

## GENERAL PROGRAM

### FRIDAY

12:00 Noon Lunch
Announcements

2:00 P.M. *General Meeting*

Welcome—A. H. Goss, on behalf of the Kelvinator Croporation.

Response—W. R. Wilson, on behalf of the Council.

How the Electric Refrigeration Industry Profits by Co-operation—J. R. Crouse, President, Nizer Corporation.

Progress Report on Co-operative Publicity and Advertising Program—F. M. Feiker, operating vice-president, The Society for Electrical Development.

Executives' Hour—Remarks by:

Herman Ely, treasurer, Servel Corp.

C. W. Stone, manager, Central Station Dept., General Electric Co.

A. W. Berresford, executive vice-pres., Nizer Corp.

W. R. Wilson, president, Copeland Products, Inc.

E. A. Mallory, manager, Electric Refrigeration Division, Westinghouse Electric and Manufacturing Co.

A. H. Goss, president, Electric Refrigeration Corp.

4:00 P.M. Sports.

6:00 P.M. Dinner.

8:00 P.M. *General Meeting.*

Electrical Codes and Ordinances—S. L. Nicholson, acting vice-president, Westinghouse Electric and Mfg. Co., *Chairman*, Sub-Committee on Uniform Ordinances, National Electrical Manufacturers' Assoc.

Remarks on Co-operation by Counsel—Francis E. Neagle.

How the Electric Refrigeration Program Benefits by the S. E. D. Market Development Plan—W. L. Goodwin, operating vice-president, The Society for Electrical Development.

### SATURDAY

8:00 A.M. Breakfast.

9:00 A.M. Committee Meetings

Executive
Sales
Advertising
Service
Production
Engineering
Commercial

11:00 A.M. Sports.

12:00 Noon Lunch.

2:00 P.M. Sports.

3:00 P.M. Presentation of reports to Executive Committee by chairman of sub-committees.

7:00 P.M. *Dinner Meeting*

Speaker, Dr. Stalker, Pastor, First Methodist Church, Ann Arbor.

Entertainment.

### SUNDAY

9:00 A.M. Breakfast.

10:00 A.M. General Meeting.

Announcement of program adopted and plans for 1927.

Speaker, Alex Dow, president, Detroit Edison Company.

12:30 P.M. Luncheon Meeting.

Looking Ahead—Earl E. Whitehorne, commercial editor, *Electrical World.*

Closing Remarks—A. H. Goss.

F. M. Cockrell, *Acting Secretary.*

## Executive Committee Program

*Friday*

2:00 P.M. General Meeting
4:00 P.M. Executive Session
8:00 P.M. General Meeting

*Saturday*

9:00 A.M. Executive Session
2:00 P.M. Executive Session
3:00 P.M. Receive Reports of Chairmen of Sub-committees.
7:00 P.M. Dinner Meeting

*Sunday*

10:00 A.M. General Meeting
12:30 P.M. Luncheon Meeting

## *"THE MAGIC BOX"*

### *Booklet for Children Will Help Boost Sales for Dealers*

It is well known that one of the surest ways to gain the attention and interest of parents is through the medium of attractive literature for children. The Society for Electrical Development, 522 Fifth Avenue, New York City, N. Y. is offering a very beautifully illustrated booklet entitled "The Magic Box." The booklet contains 16 pages, each page being illustrated in four colors. The dealer's name may be imprinted on the back cover thus giving a direct advertising value. Local groups are urged to arrange for a proper distribution of this interesting booklet, especially at electric home exhibits, community electric exhibits and other demonstrations of electric service in the home.

## Cannot See How Electricity Makes Both Heat and Cold

Among the questions asked about electric refrigeration by women interviewed in the survey which is described on the back page of this issue, several indicate that the process is highly mysterious to the feminine mind, for example:

**Does It Only Cool the Air Like a Fan?**

*A-21 Mrs._____Family of moderate circumstances, but evidently prominent in the community. Rather old large house.*

"I can't have one yet for a while because we have an expensive new icer, and there is a limit to the stretching of one's income even if you are careful. We have an expensive icer now and the electrical people seem to make no provision for taking in old icers for part payment, do they? Do they install motors in old iceboxes or are the old ones not compact enough for the electrical cold? I don't see even how electricity could make it cold when electricity makes irons hot, though I know that it does, of course. If the electricity only cools the air like an electric fan does, then I should think that there would not be a very even or lasting cold. If the time ever comes when we can afford one, we surely would never hesitate in buying one tho now I don't know about the makes or models."

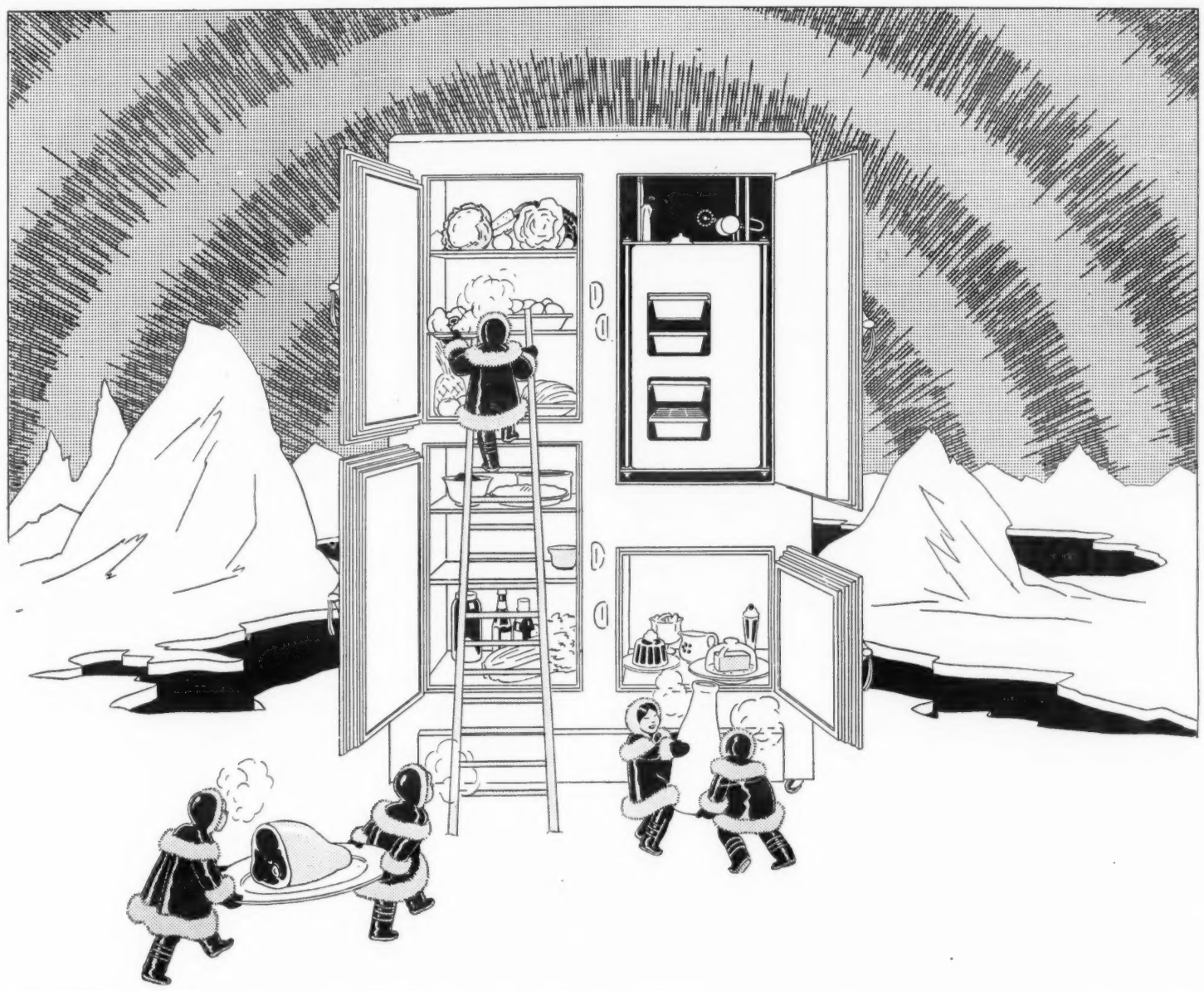
## *SALES AGENTS*

### *New Distributors and Dealers Appointed by Copeland*

Following is a list of distributors and dealers recently appointed by Copeland Products, Inc., Detroit:

Distributors—Gilpin-Smith Electric Corp., Norfolk, Va.; Copeland-Jones Co., Orlando, Fla.; Rochester Ice & Cold Storage Utilities, Inc., Rochester, N. Y.; Vicksburg-Battery Co., Vicksburg, Miss.; Shaw Tire Co., Charlotte, N. C.; Paul F. Renaud, New Orleans, La.; Home Appliance Co., Portland, Me.; Joseph A. Minst, Albany, N. Y.; Allen-Copeland Co., Salt Lake City, Utah; De Rosa Heating Co., Utica, N. Y.

Dealers—C. & W. Electric Co., Huntington, W. Va.; Wm. D. Huntoon, 48 Day St., Norwood, Mass.; Perry Electric Shop, Perry, Iowa; E. B. Clason, Midland, Mich.; Bishop Hdwe. Co., Central City, Nebr.; Jennings & Hoyt, McCook, Nebr.; Paul J. Schultz, Jefferson City, Mo.; Bellew Home Utilities Co., 49 S. 9th St., Minneapolis, Minn.; Wells Elec. Construction Co., New Richmond, Wis.; H. H. Toman, Cherokee, Ia.; O. E. Horst Hdwe. Co., Hartley, Ia.; R. G. Lubbers Hdwe. Co., Sheldon, Ia.; Gunderson Hdwe. Co., Vermillion, S. Dak.; Mattes Hdwe. Co., Odebolt, Iowa; Graber Furn. Co., Hutchinson, Kas.; John L. Hutson, Salineville, Ohio.

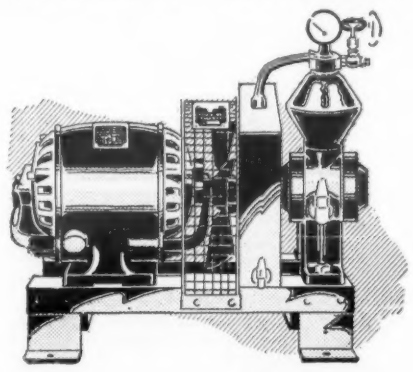
# What is ICE MAID going to do?

FOR forty-six years, merchants and industrial leaders have been expecting the utmost in dependability from products bearing the Lamson mark.

For almost half a century, Lamson has been studying and applying precision methods to the manufacture of the familiar cash carriers and tubes that you see in progressive stores and offices, and conveyor systems in factories everywhere.

Successful in this field of identified service to the general public, Lamson now brings tremendous resources of experience and assets to the development of the Ice Maid, a service to the home.

We take this step thoughtfully, with a realization of the obligations involved. We are establishing ourselves in a new and fundamental Industry, which is, as yet, struggling for rightful appreciation in the public mind. This is a time when every factor in the Industry helps either to upbuild, or to tear down, the Industry's opportunity. We are not lacking in our recognition of what we owe the Industry, or the public.



Our Ice Maid will make its way successfully. For four years it has been severely and patiently tested by us and by others, and it has our complete confidence. Users have been unusually generous in its praise.

All that we have and know are pledged to keep our product and our practice on a plane that will reflect credit on Electric Refrigeration, as well as on the Ice Maid.

We think this is the way to make a great business better.

# ICE MAID

*Electric Refrigeration*

THE LAMSON COMPANY · Syracuse, New York

# ELECTRIC REFRIGERATION NEWS

*The Business Newspaper of the Electric Refrigeration Industry*

PUBLISHED EVERY TWO WEEKS

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F. M. COCKRELL, *Editor and Publisher* F. B. RILEY, *Technical Editor*


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SEPTEMBER 11, 1926

## The Spirit of the Electrical Industry

In the electrical industry co-operation is a real and tangible thing. In many other fields the subject is often viewed from either of two widely divergent angles. It is a vague and impracticable dream, or it connotes the "practical" business of price fixing.

There are substantial reasons for the progress of co-operation in the electrical industry. Mechanically, the industry is so inter-connected and inter-dependent that considerable co-operation between the various branches, companies, and individuals is absolutely necessary, regardless of desires and motives. Manufacturers cannot sell appliances unless electric service is available, there is no market for kilowatts unless buildings are wired. Power plant equipment, wiring circuits and customers' appliances must all be designed and installed to work together. Electricity is a pliable and versatile servant, but it has its rules and refuses to work unless they are respected. Therefore, central stations, manufacturers, jobbers, contractors and dealers are forced to confer and agree in order to make the highly complicated system work.

No electrical appliance is self-sufficient. It must be hooked to the wire. No company or individual in the electrical industry can successfully disregard the rules of experience and rights of others. The founders of the business, men of vision and foresight, early discovered that a personal acquaintanceship, a friendly feeling and a real spirit of co-operation were vital to progress.

Leaders in the electrical development have given freely of their time and effort in promoting the spirit which has come to mark the electrical industry from all others. They have believed in it and enjoyed it. Stated in the most mercenary terms, they have found that "it pays."

Association Island and Waldenwoods, the scenes of activities reported in this issue, are physical expressions of the spirit of co-operation. The atmosphere which pervades these shrines of friendliness is difficult to describe to outsiders. Newcomers approach them with a feeling of curiosity and sometimes suspicion but they quickly catch the spirit and are soon "sold" on the idea. They depart with a new sense of comradeship toward fellow-workers, and become missionaries for the new gospel.

## The Opportunity

***Electric refrigeration represents the latest and most revolutionary development in the field of modern electrical service; both in the large scale on which its production has been undertaken by manufacturers; the revenue for electricity to be derived by central stations for its use; the opportunity for profitable merchandising by distributors and dealers; and its fundamental service to the public in the preservation of food, its comfort and convenience in the home.***

## Why Call It *Electric* Refrigeration?

Manufacturers of refrigerators (cabinets and boxes, we call them) are frankly puzzled, and somewhat disturbed by this new term "*electric* refrigeration." According to their view it should be called mechanical or chemical refrigeration. In their terminology an electric refrigerator is a "portable self-contained refrigerated compartment cooled by a mechanical device." As such it is only a small star in the refrigeration firmament. But the star has become a comet, whizzing hither and thither in a blaze of light and leaving a trail of dust which has blinded and choked some of the staid old-timers in the refrigeration business. After operating peaceably and profitably for two or three generations, they can scarcely be blamed for being somewhat fearful of this disturbing phenomenon.

Electrical men have long ago adopted the attitude that anything which is operated or controlled by electricity is *electrical*. The electrical industry freely uses and absorbs the products of other arts and sciences without prejudice. Whether the purpose is to provide light, heat, power or communication —whether the job is to wash clothes, clean rugs or provide a permanent wave— if electricity is used, it is a form of electrical service and the appliance is an *electrical* appliance.

So it is with the new method of protecting food. An electric motor is used, electric wiring and electric current are necessary, therefore, it is an *electric* refrigerator.

By the same token the manufacturer, distributor or dealer who makes or sells an electrical device, automatically becomes a part of the electrical industry. There is much to gain and nothing to lose by accepting this viewpoint. The industry has accumulated a knowledge and experience which is invaluable to those who would enter the field. Information is freely exchanged, particularly by the non-competitive central stations, the electric light and power companies that furnish the current, upon which every electrical device is dependent.

Now and then a manufacturer decides to use the materials or machinery with which he has become familiar to produce an electrical device. Not appreciating the interdependence of everything electrical, he decides to "buck" the industry. The result is usually unfortunate. It is the better part of wisdom to join hands with the industry and become a part of it.

As an additional aim, the ELECTRIC REFRIGERATION NEWS will endeavor to interpret the traditions, experience and spirit of the electrical industry for the benefit of the thousands of individuals who are entering the field of electric refrigeration from other industries.

## Electrical Refrigeration Educational Exhibit in Cleveland

## *BOOKLET IS PLANNED*

### *For Mailing to Prospects and Advertising Follow-up*

As a part of the co-operative electric refrigeration program the Society for Electrical Development is preparing a booklet, entitled "What You Want to Know About Electric Refrigeration." This booklet will be produced in large quantities at a low unit cost and will be available for distribution by electrical leagues, central stations, electric refrigerator distributors and dealers. It will be especially suitable for follow-up work in connection with local co-operative programs.

## HIGH CODE OF ETHICS ESSENTIAL

### W. T. Gray, Delco Distributor, Approves Local Council Work

Commenting upon the value of his connection with the local Electrical Refrigeration Council of Cleveland, F. W. Gray, 2122 Euclid Ave., says:

"I think this Council has been a great asset to every member connected with it, because its main foundation is a high code of ethics in the sale of our products, and this is a very essential thing to be successful in any business. It has brought the competitive companies selling this product much closer together, both from a business and social standpoint, and this is another asset I believe to any business.

"It has certainly been a great satisfaction for me personally to be a member of this Council, and I do not hesitate to say absolutely that it has placed me in a position where I have been able to increase my business very materially, and in addition operate it on a very high plane."

## Farr Endorses Co-operation in Cleveland

Ernest W. Farr, Kelvinator Distributor Hanna Bldg., Cleveland, O., comments on the results of the co-operative movement among the elective refrigerator distributors as follows:

"Our monthly get-to-gether meetings held in the rooms of the Electrical League at noon make a nice setting for threshing out the problems that are bound to come up, and have eliminated much of the unethical practice that prevailed here prior to the formation of this organization. We feel that in getting this group together, Mr. Crouse started something which should be a great help to the future development of this great industry in a constructive way.

"I might add, that relations between competitors, prior to the formation of this organization, were anything but pleasant. We find, however, that none of our competitors are bad fellows and that each one is just as anxious to find an equitable way as we are."

## Cleveland Sales Increase 111% Over Last Year

J. E. North, president, the Electrical League of Cleveland, announces that a report from the three electric refrigerator distributors who were in business throughout the year of 1925 and a report from nine electric refrigerator distributors who have been in business during the first seven months of 1926 shows the following total sales for the first seven months of 1925 and for the first seven months of 1926:

*1925 Sales*—Number of units sold—1261—amount $451,426.

*1926 Sales*—Number of units sold—2668—amount $985,692.

While some of these units may have been sold for commercial use, the totals are intended to represent the number of household units sold by the various distributors for use in greater Cleveland.

Mr. North calls attention to the increase of approximately 111% in the number of units sold in 1926 over the same period of time in 1925.

## QUESTIONS ASKED BY PROSPECTS

The public wants to know about electric refrigeration. It is evident that many questions remain unanswered in the minds of large numbers of prospective users. This is indicated by reports received from investigators. A careful tabulation has been made of the questions asked. Those recurring most frequently are given below:

The NEWS desires to obtain the best possible answers to each of these questions. Your co-operation is invited. The following answers to the questions are merely suggested. No doubt they may be greatly improved. If you have a better answer, which does not include the name of a specific make, send it in.

QUESTION: Is an electric refrigerator difficult to install?

*Answer:* No, it may be installed as easily as any other electric appliance today—simply attach to any electric outlet and turn the switch of the motor.

QUESTION: Is it noisy?

*Answer:* There is a slight whirr to the motor. Most people soon cease to notice this because of the evenness of the sound. If desired, the motor can be located in the basement or some other place out of hearing range.

QUESTION: Where should it be located?

*Answer:* Wherever desired. To save steps, it should be in a spot where it is most convenient for daily use in the preparation of meals.

QUESTION: Is it safe?

*Answer:* As safe an any electrical device on the market—and washing machines vacuum cleaners, and other appliances are generally recognized by the public as practically fool-proof.

QUESTION: Does it need much repair?

*Answer:* No, in most refrigerators, there are very few moving parts and adequate provision is made for oiling so that wear is reduced to the minimum. Nearly every reputable dealer guarantees a year of free servicing, during which time, he inspects the refrigerator regularly and makes any adjustments which might become necessary.

QUESTION: Can we use the box we have now?

*Answer:* Yes, if it has sufficient storage capacity for the needs of your family and is of satisfactory modern construction so as to yield the low temperatures of which electric refrigeration is capable.

QUESTION: Which is the best make?

*Answer:* There are several reliable electric refrigerators on the market today. In general, choose the machine which in your community has proved satisfactory and which is sold by a responsible dealer equipped to properly service the machine should it require attention.

QUESTION: How much does it cost?

*Answer:* That depends upon the size and other conditions. The initial cost of the mechanical unit is greater, of course, than that of an ice container, but where a nominal rate for electricity prevails, it soon pays for itself in operating costs. Even where electricity is dear, the operating cost is no greater than for burning an extra light.

QUESTION: Is dryness an advantage?

*Answer:* Yes, bacteria multiply in warmth and moisture. Electric refrigeration collects all moisture in the air of the food compartments, and deposits it on the cooling unit. The frost, which results, should be removed from the coils about twice a month by disconnecting the power for a few hours.

QUESTION: What do you put in it?

*Answer:* Nothing. Once the electric button is pressed, no attention is required except to let the coils defrost about twice a month.

QUESTION: What temperature does electric refrigeration keep?

*Answer:* The different compartments vary, but all are always well under 50 degree F.—the danger point for the growth of bacteria. The cooling unit is right at the freezing point, 32 degrees F. Directly under this section a temperature of 36 to 40 degrees is maintained. In many electric refrigerators, the temperature never rises above 45 degrees.

QUESTION: Does it make enough ice?

*Answer:* Yes, most refrigerators have at least three freezing trays, each containing ten or twelve cubes of ice.

QUESTION: Can you make frozen desserts easily?

*Answer:* Yes, ices, mousses, cocktails, parfaits, salads, puddings, and other frozen treats can be easily frozen or chilled by leaving them in the tray for a few hours.

## S. E. D. Management Pledges Support to Electric Refrigeration News

| CLASS OF SERVICE | SYMBOL |
|---|---|
| TELEGRAM | |
| DAY LETTER | BLUE |
| NIGHT MESSAGE | NITE |
| NIGHT LETTER | N L |

If none of these three symbols appears after the check (number of words) this is a telegram. Otherwise its character is indicated by the symbol appearing after the check.

**WESTERN UNION TELEGRAM**

NEWCOMB CARLTON, PRESIDENT GEORGE W. E. ATKINS, FIRST VICE-PRESIDENT

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| NIGHT LETTER | N L |

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The filing time as shown in the date line on full-rate telegrams and day letters, and the time of receipt at destination as shown on all messages, is STANDARD TIME.

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F M COCKRELL
CARE CONDUCTOR TRAIN SIXTY FIVE THE AMERICAN PENNSYLVANIA RR WEST BOUND DUE 950 PM HARRISBURG PENN

HAVE JUST WIRED CROUSE AS FOLLOWS COCKRELL HAS PRESENTED HIS RESIGNATION TODAY TO UNDERTAKE FOR HIMSELF PUBLICATION OF ELECTRIC REFRIGERATION PAPER GOODWIN AND I HAVE PLEDGED OUR PERSONAL SUPPORT ON BEHALF OF SOCIETY AND REFRIGERATION PROGRAM COCKRELL WILL BE IN DAYTON TOMORROW DETROIT SATURDAY AND ISLAND ALL WEEK WILL CONFER WITH YOU AT ISLAND ON ACTING SECRETARYSHIP STOP UNDER CIRCUMSTANCES BELIEVE MATTER OF SECRETARY CAN BE TERMINATED EITHER NOW OR REMAIN UNTIL WALDENWOODS MEETING AS YOU SUGGESTED BELIEVE LATTER QUITE PROPER UNDER CIRCUMSTANCES

F M FEIKER.

# Nizer Offers Free Training in Electric Refrigeration Service

## Correspondence Course in 24 Lessons Prepared —Great Demand for Service Men

Within the last year more electric refrigeration units have been installed in America than in the five years preceding. Opportunities are numerous for trained men. There are more positions open for the expert in electric refrigeration than there are men to fill them. Competent service men must be developed immediately to fill the pressing demand.

The Nizer Corporation, Division of the Electric Refrigeration Corporation, 7424 Mackie Street, Detroit, Michigan, has organized the Nizer Service Correspondence School to provide students with expert training in electric refrigeration. The complete course will consist of 24 semi-monthly lessons, separately presented in convenient booklet form. The course is free of charge and every manufacturer of ice cream, his service men and salesmen are invited to enroll.

No distinction is drawn between companies using the Nizer or competitive cabinets, electric or otherwise. It represents Nizer's contribution to the advancement of the industry as a whole and of the men connected with it. The only condition of membership is that the enrollment card be filled out by the applicant and endorsed by a responsible executive of an ice cream manufacturer. The introductory lesson is reprinted in full, below, by courtesy of the Nizer Corporation:

### General Theory of Refrigeration the Subject of First Six Lessons

Copyright, 1926, by Nizer Corporation

By reason of the fact that the greatest development of applied small unit refrigeration has taken place within the present decade, the great majority of men upon whom the burden of small unit service has fallen are men whose earlier training has not particularly fitted them for their work. As a result of this, they are working with a machine, the operation and principles of which are vague to them. This lack of knowledge on their part handicaps their work and hinders their progress.

If the coming years produce a development of refrigeration application of the same magnitude as the past few years have shown, this condition will soon cease to exist, and even the general public will then be as familiar with mechanical refrigeration as they now are with the automobile and the radio. When that day comes, it will be a happy one for the owner of small unit refrigeration apparatus, for then his equipment will be assured of the intelligent service which is so essential to its satisfactory functioning and which at present is so often lacking, just because the man now rendering the service has never had the opportunity to learn the principles which underlie the operation of a refrigeration system.

Although a man has not had the opportunity to study refrigeration, his case is not a hopeless one, for the principles of refrigeration and the operation of most of the present successful units are so simple that he may master them with very little study if only they are presented to him in the proper form. These lessons are the outgrowth of an attempt to help the service men and cabinet users in this respect, by presenting to them, in a simple and easily understood form, the principles of refrigeration as they apply to the small unit, and at the same time giving them a very thorough course in the care of equipment itself.

The future of automatic electric refrigeration is so brilliant that it would be unfair to limit all the lessons to the mechanical ice cream cabinet, so the entire course, which consists of twenty-four separate lessons, is divided into four main divisions. The first group, consisting of six lessons, will deal with the general theory of refrigeration and is planned to give the student an understanding of the subject which he may apply to any refrigeration problems. The second group of lessons will deal exclusively with the Automatic Electric Ice Cream Cabinet and will be a very complete service course. The third series will deal with the mechanically refrigerated fountain, and the fourth with the commercial application of the small unit.

### Four Written Examinations Required to Pass the Course

At the end of each of the four main divisions, and also during the progress of a course, the student will be required to take a written examination on that part of the course just completed, and as an evidence of his sincerity of purpose, will be required to satisfactorily pass the examination before additional lessons are sent to him. The student may make as many attempts as necessary to pass an examination, and in all cases his corrected examination paper will be returned to him.

Important as this feature is, it is hoped that the course will not be limited to the issuing of lessons and occasional examination papers, but that it will partake of the more general nature as suggested by its name, that is, that it will be a real correspondence course. The course headquarters will be a clearing house for all general information pertaining to Nizer equipment and its operation. Those enrolled are urged to present their refrigeration problems to the attention of this department, and whenever possible a solution for them will be returned.

### Early Methods of Producing Cold

To give some idea of what has already been accomplished in the field of refrigeration, and at the same time to acquaint the student with its magnitude, the balance of this lesson is devoted to the general history of refrigeration, together with a conservative prediction of the future of this great industry.

The practice of cooling bodies below the temperature of the atmosphere has been carried on for centuries, although in the light of our present day methods the earlier attempts at refrigeration were decidedly crude. The earliest method, and perhaps one of the most widely used, consisted of placing the article to be cooled in a cave or other cool place, and although this method was of some benefit it was possible to secure temperatures of only a few degrees lower than those generally available. Later on the secret of cooling liquids by evaporation was stumbled upon and porous earthenware jars were made use of. The water which was to be cooled was placed in these vessels, and some of it, by soaking through and evaporating on the surface of the vessel, produced a certain amount of cooling in the remainder. This method is still made use of in some localities where the atmosphere is dry and evaporation correspondingly rapid.

However, all these methods were decidedly limited in their effectiveness, and a statement by Lord Bacon expressed very well the condition of affairs during his time. "Heat and cold are Nature's two hands whereby she chiefly worketh, and heat we have in readiness in respect to the fire, but for cold we must stay till it cometh or seek it in deep caves or high mountains and when all is done we cannot obtain it in any great degree, for furnaces of fire are far hotter than a summer's sun, but vaults and hills are not much colder than a winter's frost." Lord Bacon well realized what a useful thing it would be if man could have the same command of cold as of heat.

The effectiveness of ice and snow for refrigeration purposes was early realized, and history records it that the Emperor Nero had vast numbers of slaves whose duty it was to bring snow from the mountain tops in order that the Emperor's wines might be served to him at the proper temperature. Alexander the Great also realized one of the advantages of proper refrigeration, and it was his habit to send his soldiers into battle in the proper fighting spirit by supplying them with wines and beverages which had previously been artificially cooled.

Saladin, leader of the Mohammedan army in the East, is said to have greatly surprised Richard The Lion Hearted during the latter's illness, by sending him a frozen sherbet. Early in the thirteenth century Marco Polo, a great Italian navigator, brought the first recipe for water and milk ices from Japan and China, showing that some form of refrigeration must have been practiced at that time in those countries.

The people of the older countries, especially of those sections in which the consumption of wine is large, have always been devotees of better living, and history gives record of the many uses to which they have put ice and snow. Today many of these people still harvest their own ice from the lakes and rivers and store it in caves or partially insulated ice houses for use during the warmer months of the year.

The production of ice seems to have been the incentive for the work of the early inventors and engineers, but as time went on the refrigeration requirements of the meat packing, brewing, and other industrial enterprises, and the application of refrigeration to the preservation of perishable food products and the manufacture of ice cream outgrew the scope of ice refrigeration and the need for direct refrigeration became evident. The requirements of these industries are very largely responsible for the present development of mechanical refrigeration.

### First Ice Machine Invented in 1775

The first machine to produce ice by purely mechanical means was the invention of Dr. Wm. Cullen in 1775, and the history of mechanical refrigeration may be said to date from that year. Dr. Cullen's invention consisted of a vessel of water which was connected to a vacuum pump. By means of the pump he so greatly reduced the pressure within the vessel that the water in it was forced to evaporate. As a result of this evaporation enough heat was carried away to turn the remaining water into ice. This principle is known as the vacuum process and several machines were later constructed to operate upon it.

In 1810, knowing the affinity of sulphuric acid for water, Sir John Leslie succeeded in making ice by an application of this principle.

The credit of inventing the first machine along the lines of our modern apparatus is given to Jacob Perkins, an American engineer. The ice machine perfected by Perkins, consisted of a compressor, evaporator, condenser, and expansion valve quite similar to those now in use and was successful in producing ice in commercial quantities.

In 1853, Professor A. T. Twining of New Haven, Conn., using sulphuric ether as a refrigerant, built a machine capable of producing ice at the rate of 1600 pounds in 24 hours. In comparison with this achievement we today have refrigeration machines of 400-ton ice making capacity. In 1851 Dr. John Gorrie of Apalachicola, Fla., patented the first compressed air refrigerating machine, which was the forerunner of the present-day dense air machines. In 1861 Dr. Alexander Cook invented a compressed air machine with a pump and hot and cold chambers. This machine was operated from the burning of coal and is said to have produced four pounds of ice for every pound of coal consumed. Although a remarkable achievement at that day, this machine appears very inefficient when compared with our modern ice making plants which are capable of producing two or three times this amount of ice for every pound of coal fed to them. In 1873 Raoul Pictet produced the first $SO_2$ machine using as a refrigerant a liquid consisting of 97% $SO_2$ and 3% $CO_2$.

### Ammonia Machine Developed 1875-78

From 1875 to 1878 Mr. David Doyle worked on the compressor type of ammonia machine and is given credit for doing the most toward the development of the ammonia machine during that period. A great many other names and events stand out in the history of the development of mechanical refrigeration, but lack of space prevents their mention here.

Although the art of mechanical refrigeration has made steady progress ever since its beginning, it has been somewhat retarded in most localities by the abundance and cheapness of natural ice. Within the last few years, however, there have been several off-seasons in the natural ice supply and the demand for mechanical refrigeration has correspondingly increased. In addition to this, by virtue of its many advantages, such as cleanliness, convenience, and accurate control of temperature, mechanical refrigeration is constantly forcing itself to the front, with the result that ice refrigeration systems are being discarded almost as rapidly as mechanical systems can be designed to take their places. The mechanical ice cream cabinet is only one of the many examples of this.

### Refrigeration Now Used in Manufacturing Processes

The use of mechanical refrigeration is by no means confined to those industries which have to do with the storage and preservation of food products, but is finding a large application in a great many manufacturing processes. A recent and interesting use for mechanical refrigeration has been found by the manufacturers of wood pulp paper. A large amount of sulphuric acid is used by these concerns

(Continued on page 6 column 2)


## WANTED

ELECTRIC REFRIGERATION NEWS desires to obtain at once the names and addresses of every electric refrigerator distributor, dealer, salesman and service man.

All available lists are incomplete because of the rapid growth of the industry.

In order to acquaint the industry with the valuable information and interesting news which will be furnished in the columns of this paper, sample copies will be sent free for a limited period to all those interested.

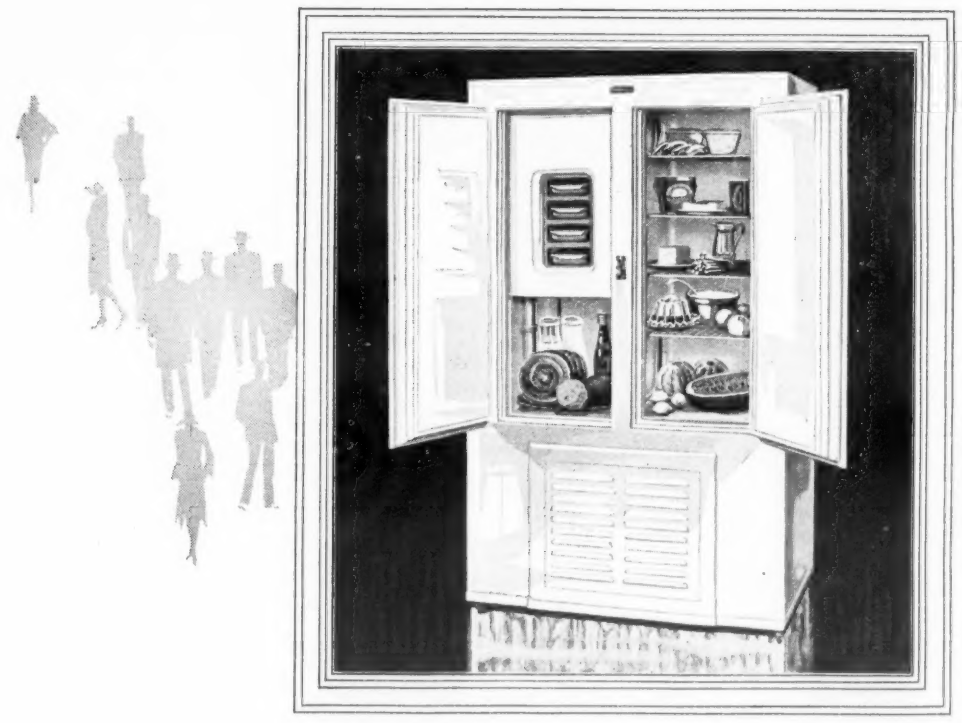
**To new business and commercial managers of central stations:**

**You are especially invited to furnish names of all distributors and dealers in your city.**

**Electric Refrigeration News**
**818 West Hancock Avenue**
**Detroit, Mich.**



# PUBLIC GOOD WILL



THE selection of tested and proved products like Kelvinator to form your line of electric appliances is vital to the building of public confidence

KELVINATOR CORPORATION, 2051 W. Fort St., Detroit, Mich.
*Division of Electrical Refrigeration Corporation*
KELVINATOR OF CANADA, Ltd., 1132 Dundas St. East, LONDON, ONT.

# Kelvinator

The Oldest Domestic Electric "Better-Always-Better" Refrigeration

# Delco Sues Absopure to Uphold Claims on Refrigerator Patents

## Bill of Complaint Filed in Federal Court Charges Infringement by General Necessities Corporation

Legal proceedings recently instituted by The Delco-Light Company of Dayton, Ohio, against the General Necessities Corporation of Detroit, Michigan, will undoubtedly prove to be of far reaching importance in determining the future development of the electric refrigeration industry.

The bill of complaint filed in the United States District Court, Eastern District of Michigan, Southern Division, charges that the defendant company is infringing upon basic patents. The Delco-Light Company seeks to establish its right to the air-cooled machine and other important features now being widely used by other manufacturers.

It is reported that the General Necessities Corporation, which manufactures the Absopure Frigerator will vigorously contest the suit, and that steps have been taken to secure the active assistance of other manufacturers who might become involved in similar litigation if The Delco-Light Company should be upheld by the courts.

Because of the importance of these proceedings the complete transcript of the Bill of Complaint has been printed by Electric Refrigeration News and copies will be furnished to subscribers upon request.

Printed copies of specifications and drawings may be obtained from the flnited States Patent Office, Department of Commerce, Washington, D.C., for 10c each.

### Patents Involved in Delco Suit

**Kramer 1,280,765 Oct. 8, 1918.**
**Claims 3, 4, 5, 6 7**

**Kramer 1,281,027 Oct. 8, 1918.**
**Claim 1**

**Joy 1,502,914 - July 29, 1924.**
**Claim 9**

**Wolf 1,291,334 - Jan. 14, 1919.**
**Claims 1, 2**

**Wolf 1,337,175 - Apr. 13, 1920.**
**Claims 10, 15, 16**

**Tibbetts 1,276,450 Aug. 20, 1918.**
**Claims 1, 2, 3, 4, 6, 7**

**Tibbetts 1,296,879 Mar. 11, 1919.**
**Claims 4, 5, 7, 8**

# U. S. TO CO-OPERATE IN RESEARCH WORK

## Agriculture Department Plans Food Protection Study

Scientific research to determine facts about the effect of electric refrigeration on the protection of food is one of the most constructive features of the electric refrigeration program. One-tenth of the total fund of $100,000.00 was allocated by the subscribing members for this part of the program. It will provide neutral and authoritative data which will become the property of the Society and the Electric Refrigeration Council. It was agreed that full credit will be extended to the scientists, university, or other authority in any publicity which may be given to the findings.

Arrangements have already been made with the Bureau of Home Economics of the U. S. Department of Agriculture to undertake certain important phases of this research. A fellowship has been established under a plan which the Department of Agriculture has provided, and the work will be carried on under the direction of Dr. Louise Stanley. A woman, trained in domestic science, has been employed to devote full time to the study of the relation between electric refrigeration and food protection, and the part time of one of the technical men of the Bureau has also been secured.

It will require several months to complete the study, the results of which will be published in the regular bulletins of the Department of Agriculture. These bulletins are widely distributed to the domestic science departments of universities and colleges, state and county experimental stations, organizations and individuals directly interested in educational work affecting food and home conditions generally. This arrangement is particularly advantageous since the Department of Agriculture is recognized as an authoritative source of information and is known to be absolutely free from prejudice or commercial bias. It is confidently expected that the data secured will be a great contribution to the public knowledge of food protection and refrigeration.

# NIZER SERVICE COURSE

## Correspondence Training in 24 Lessons Offered

(Continued from page 5 column 5)

in the production of their product, and it was formerly necessary to discharge all of the waste acid into the lakes or rivers, resulting in the pollution of those bodies and the killing of the fish life in them. The used acid is now discharged into a large receptacle, the temperature of which is reduced by refrigeration to such an extent that the greater portion of the acid is now recovered.

Lumber yards, especially those interested in furnishing high grade lumber for aeroplanes, pianos, phonographs, etc., use mechanical refrigeration for removing the moisture from the air before it is admitted to their drying kilns. The oil and steel industries are also finding uses for mechanical refrigeration both in their laboratories and factories.

**Automobiles Tested at 20° Below Zero**

A very interesting example of mechanical refrigeration is to be found in the factory of a large motor car company at Detroit. There, a testing room has been built in which it is possible to obtain almost any temperature desired. The car or engine to be tested is placed in this room and in one particular test the temperature was reduced to and held constantly at 20 degrees below zero. In connection with the test a blower was so arranged as to direct a current of air against the radiator of the test car, so that all the conditions of low temperature operation were created without going outside the plant itself.

Another large and continually growing field for mechanical refrigeration is to be found in the artificial cooling of theaters and department stores during the warmer months of the year. Such a use of refrigeration has clearly demonstrated its economic value. In connection with theaters and show houses, experience has shown it almost impossible to keep the summer attendance anywhere near that of the winter, even in the face of considerable price reductions. The application of refrigeration, however, has overcome the heat problem and in many cases is making the summer business the greatest of the entire year. The cooling of the atmosphere in the theater building shows the feasibility of this idea, and it is but a step from the refrigeration of public buildings to the artificial cooling of the rooms in our homes and, without a doubt, the coming years will find some of us cooling our homes in the summer just as we now heat them in the winter. In fact, the two processes may be so combined under the one control as to provide us with constant room temperatures throughout the entire year.

Some of the examples of mechanical refrigeration just quoted no doubt require the use of large manually operated units. A great many of them, however, are the proper field for the smaller automatic machines, and as this type is further perfected we may even find batteries of them being used where one large machine is now serving.

**Pullman Cars Offer Field for Development**

No mention has yet been made of the opportunity for the use of mechanical refrigeration which presents itself in the case of the railway refrigerated car. Thousands of these cars are constantly in operation and are still being cooled by ice only because the proper adaptation of the mechanical unit has not yet been made to them. The Pullman cars and day coaches also offer a field for mechanical refrigeration units and especially in view of the rapid electrification of railroads which is now taking place, the future will no doubt show us thousands of them in service on our railroads.

Since the small mechanical refrigeration unit is now so largely used in connection with the ice cream industry, it is rather fitting that we should close this lesson with some reference to that particular field.

**Ice Cream First Served to George Washington**

Ice cream was introduced in the city of Washington by Mrs. Alexander Hamilton at a dinner at which George Washington was in attendance. In view of the fact that George Washington was the first president of our country, the event is doubly interesting. Ice cream was first advertised in a New York paper in 1786. Jacob Fussel of Baltimore, Md., is said to have been the first man in the United States to make a business of the manufacture of ice cream.

It was in the year 1890 that machines and processes were perfected and marketed in this country by which ice and refrigeration could be produced in such quantities as to be of commercial value. The history of the ice cream industry shows that its greatest growth took place after this event, so we may well say that the history of the ice cream industry and of the refrigeration industry have been one.

**400 Industries Use Mechanical Refrigeration to Some Extent**

Besides the application of mechanical refrigeration already referred to, there are nearly 400 other industrial enterprises in the United States in which mechanical refrigeration plays some part and, large as this list now is, it is continually growing, for new applications, especially for the small automatic unit, are being discovered daily.

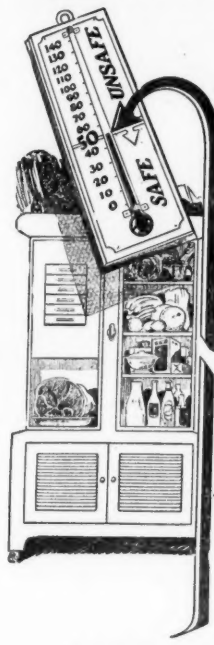
In the field of small unit refrigeration, more perhaps than in any other, the rate of development has been controlled, not by any lack of application for it, but almost entirely because of the lack of men with the qualifications to carry on the work. This condition is now rapidly changing, for engineers and inventors all over our country are taking hold of the small unit refrigeration problem and the success of its future is assured. Whether or not we shall partake of the benefits of this success depends largely upon the knowledge which we can gain along the lines of this great undertaking while it is still in its infancy, and it is with the sincere purpose of being of help by making available some of this knowledge that this lesson and those which will follow it are published.


(An Advertisement in the Cleveland League Series)

Page Two — Electrical Section of The Cleveland News — Sunday, July 11, 1926

For Health Economy Convenience

Electrical Refrigeration!




for HEALTH

1 Electrical refrigeration protects the family's health.
2 Extensive experiments by the government have shown that food must be kept in an atmosphere that is both dry and cold—below 50 degrees Fahrenheit—if the food is to be preserved in perfect condition.
3 In the electric refrigerator the temperature is constantly maintained below the danger mark at which germs develop and multiply, and at which food deteriorates and poisonous decay sets in.
4 Food stored in the electric refrigerator is kept fresh and pure for long periods. Meats stay firm, green stuff is kept crisp and milk retains its sweetness.
5 Food which has been kept in an electric refrigerator is food that insures good health.

for ECONOMY

1 Electrical refrigeration is very economical.
2 The cost of keeping the temperature in an electrical refrigerator *within the health zone*—below 50 degrees—is low.
3 Electrical refrigeration reduces food spoilage to the irreducible minimum.
4 The electric refrigerator is conducive to buying at lower costs, for it enables purchasing in larger quantities without fear of spoilage.
5 The electric refrigerator economizes on time spent in marketing, for it means fewer trips to the market; it is automatically controlled and therefore does not require daily attention.

for CONVENIENCE

1 The design and construction of the electric refrigerator makes it easy to keep it perfectly clean and sanitary.
2 The refrigerator can be located where it saves steps to the sink, range or dining room table.
3 It affords the great convenience of always having ice cubes of just the right size for cold drinks.
4 It is in effect a miniature manufacturing plant in which all sorts of delicious frozen foods can be made, these foods being chilled or frozen in the ice cube trays.
5 It simplifies the preparation of salads, jellied meats, fruit cocktails and many other delightful delicacies.

*Depend on It!*
*The current that operates the electric refrigerator comes from the same dependable public utility service that lights your lamps and powers your appliances. But—with the refrigerator, you need not so much as press a button; the machine does that for itself.*

*See the Display of Electric Refrigerators at the Exhibit of Everything Electrical for the Home, 14th Floor, The Statler. Admission Free.*

The Electrical League
14TH FLOOR HOTEL STATLER



# A Tribute!

UNIQUE in the annals of industry is the progress of electric refrigeration. True progress! Unfettered by blind selfishness. Inspired by a broad vision of benefit to all people.

Here are great companies directing their tremendous efforts to a common end—the advancement of a new art of living, the better preservation of human foods.

Competitors only in the best sense—conscious that their individual achievements are worth while solely in the measure that they are constructive and mutual.

Standing upon such a foundation, electric refrigeration has become a cause, an issue which touches intimately the heart of our nation.

And, to the future of such a cause, there can be no limit.

NIZER
CORPORATION
*A Division of Electric Refrigeration Corporation*
DETROIT

# Rapid Expansion is Predicted for Electrical Refrigeration

## New York Public Utility Men See Speedy and Continued Growth Ahead for Industry

"The subject of Domestic Refrigeration is exciting keen interest on the part of the average householder, and is destined to become a very important part of our business. It has passed the final phase of the development period, and is now definitely on a commercial basis. During the past few months, at least one hundred manufacturing concerns have entered into the manufacture of the household type of electric refrigerating equipment.

In a report recently issued by the Committee on Domestic Refrigeration, Metropolitan New York Section, National Electric Light Corporation, the present status of electric refrigeration is summarized and the future growth is outlined as follows:

**Successful Machines Are Compression Type**

"There have been no radical developments in the types of electric refrigerators placed on the market during the past year, but there have been several changes in design which tend to make the electric refrigerator more compact and efficient. One of the leading electric manufacturers has designed a special motor for this class of service, one of the features being its extremely quiet operation. Practically all of the successful machines on the market are of the compression type.

"The absorption machine which offers great possibilities because of the absence of moving parts, is being developed, but as yet this type of machine has not been placed on the market in any considerable quantity. The established manufacturers of the compression type of machine have greatly expanded their manufacturing facilities, and have added new sizes and designs to meet the ever increasing demand for electric refrigerators. Present indications are that not only during the year 1926, but for several years to follow, there will be a continued and rapid expansion in this industry.

**Will Come into General Use in Short Period**

"Electrical refrigerators, by reason of their efficiency and convenience, will come into quite general use within a comparatively short period. This type of refrigerator not only preserves foodstuffs for a longer period, but the operating cost is not excessive when compared with the actual cost of ice as used in the present types of household refrigerators.

"The electric refrigerator maintains a uniform temperature many degrees colder than that maintained by the ordinary iced refrigerator, and the air within is less humid. Foods are preserved for a longer period because of low temperature, and dry air, which tend to prevent deterioration. It is quite natural, therefore, that the domestic electric refrigerator should have met with such great success.

**Remarkable Development in Commercial Applications**

"The recent development of the electrical refrigerator has not been confined entirely to the household type of machine. For the past several years there has been a gradual replacement of iced refrigerators in meat markets, delicatessen stores, etc. During the past eighteen months, however, a very remarkable development has taken place in ice cream stores and soda fountains.

The so-called ice cream cabinet which formerly was refrigerated entirely by ice is rapidly being supplanted by the electrically cooled cabinet. In many stores which sell ice cream manufactured by the larger producers of ice cream, the manufacturer supplies, installs, and services the ice cream cabinet, the store proprietor merely paying for the electricity used.

"The installation of the electrically cooled ice cream cabinet has expanded so rapidly that a comparatively few of the older type of cabinets remain in the Metropolitan district. The operation of the electrical ice cream cabinet is most satisfactory to the dealer as it eliminates the necessity of storing and chopping large quantities of ice. The operating expense for the electrical equipment is considerably lower than the cost of ice. All of the dealers, who are using electrically cooled ice cream cabinets are most enthusiastic in expressing their satisfaction with its performance.

"In many instances in the Metropolitan district electrically cooled soda fountains have been installed in connection with the ice cream cabinets. However, this change has not been as rapid as the change in the ice cream cabinets themselves, but the installation and development of electrically cooled soda fountains are very satisfactory indeed.

**Significant Effect on Electrical Industry**

"In discussing the electrical refrigerator, it is well to recognize the significant effect it will have on the electrical industry. The electric refrigerator will at least double the average residential bill for electricity. The addition of $30.00 to $50.00 annually to the bill of the residential customer will have a most important effect on the Central Station industry as a whole.

"One important phase of the domestic refrigerator situation in the Metropolitan district, where apartment houses are being equipped with refrigerators, is the question as to the desirability of installing individual refrigerating units in each apartment or a central refrigerating plant to supply the entire building. The Committee is investigating this question, and from the available data on hand, the indications are that the installation and operation costs favor the individual unit in each apartment. The Committee recommends that this subject be thoroughly investigated by next year's Committee as it is particularly important in this territory.

**Liberal Advertising Recommended**

"This Committee does not desire to make specific recommendations as to the attitude of the various member companies toward the subject, but they do desire to recommend that each member company foster the sale and use of electrical refrigeration by means of liberal advertising in local newspapers, by displays, demonstrations in their showrooms, and by intensive promotion work in co-operation with various manufacturers. The Committee believes that the sale of domestic refrigerators by the manufacturers has progressed to such an extent that these machines will be sold in the Metropolitan district in large numbers with the co-operation of the lighting companies.

**Prompt Service Very Important**

"A very important point to be considered in the operation of electric refrigerators is prompt service to the customer when it is required. Two of the Committee's meetings were devoted entirely to the subject of servicing the domestic type of machine. These meetings were held in conjunction with representatives from two of the leading manufacturers.

"Most of the manufacturers are in a position to render prompt service work for the machines which they have sold, but this Committee is of the opinion that each lighting company should be in a position to render emergency service to any of its refrigerator customers when necessary. This will require that some individual or group of individuals in each company must be familiar with electric refrigerators to such an extent that emergency service can be rendered. If the users of electric refrigerators are unable to operate them because of lack of proper attention in making minor adjustments, the entire refrigeration industry is liable to be seriously injured."

### New York Committee on Refrigeration

J. F. KELLY, New York Edison Company
C. K. NICHOLS, New York Edison Company
T. J. DALEY, Bronx Gas and Electric Company
S. BENNIS, United Electric Light and Power Company
PRESCOTT BEACH, New York and Queens Electric Light and Power Co.
T. J. COLLINS, Brooklyn Edison Co.
E. J. DONNELLY, Queensborough Gas and Electric Company
J. RADCLIFFE, Yonkers Electric Light and Power Company
F. J. GRUEL, Westchester Lighting Company
L. J. MONTGOMERY, Chairman, New York and Queens Electric Light and Power Company

## Leonard to Produce 500,000 Boxes in 1927

The Leonard Refrigerator Company of Grand Rapids, Mich., a division of the Electric Refrigeration Corporation, has entered upon a program of expansion which will give this division a production capacity in excess of 500,000 units in 1927. $1,500,000 was recently voted by the Board of Directors for the enlargement of plant facilities.

C. H. Leonard, founder of the business, received his first patent on a refrigerator in 1880. The first manufacturing operations were undertaken in a small building also occupied by the Bissel Carpet Sweeper Company. For a number of years the business was carried on as a sideline to the H. Leonard & Son's crockery and household goods store. In 1904 the refrigerator company was formally incorporated with a capital of $150,000. Some months ago the business was sold to the Electric Refrigeration Corporation for $6,000,000.

### Outlook Editor Suggests Name for Paper

Don C. Seitz, director and associate editor of *The Outlook*, one of the headliners on the program at Association Island last week, having delivered himself of some wholesome advice to the electrical industry at large, with a few wise cracks thrown in, was homeward bound. Thereupon he turned his mighty mind to the affairs of the world's newest newspaper. "What are you going to call it," sez he, "The Freeze Wheeze?"

## Frigidaire Sales in Atlanta $154,353 in 6 Weeks

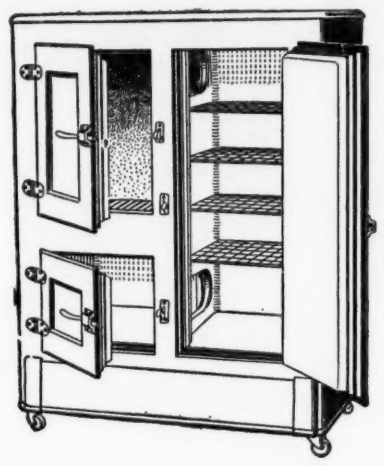
H. A. Pendergraph, merchandise manager, Atlanta Branch, Georgia Railway and Power Co., reports a very successful campaign of six weeks' duration during which time orders for Frigidaires to the amount of $154,353 were obtained.

"We are just softening the market this year," Mr. Pendergraph says, "and getting ready for the big drive next year."

The Georgia company gives two-year terms and requires only $10.00 down payment.


LAST CALL!
GET YOUR
FRIGIDAIRE
THIS WEEK
$10 DOWN
GEORGIA RAILWAY AND POWER CO.
A CITIZEN WHEREVER WE SERVE





*Refrigerator Cabinets by Leonard for Ice and Electric Refrigeration*

Over two million Leonard Refrigerators are in use today. Leonard has been the leader of the industry for 45 years.

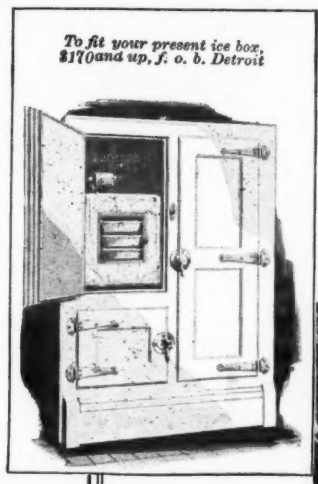
The Leonard Cleanable leads the line. Porcelain and Oak Cabinets, with porcelain interiors, have an inside insulation wall of two-inch pressed corkboard.

These quality refrigerators are found in the finest homes of America, many of them with electric refrigeration.

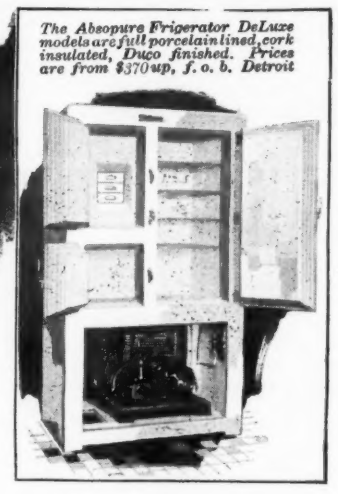
*Leonard*
Refrigerator Company
*Division of Electric Refrigeration Corporation*
Grand Rapids, Michigan



*To fit your present ice box, $170 and up, f. o. b. Detroit*



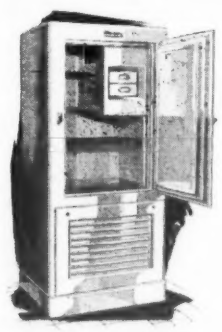
*The Absopure Frigerator DeLuxe models are full porcelain lined, cork insulated, Duco finished. Prices are from $370 up, f. o. b. Detroit*



*Back of This*

*A full line for Homes, Apartments, Ice Cream Dispensers, Stores, Florists, Delicatessens.*

# Economical Electric Refrigeration
## *Are 25 Years Practical Refrigerating Experience*



*The Absopure Frigerator A-5-2 food space 5 cubic feet, handsomely lined, cork insulated, Price $225, f. o. b. Detroit*

Advantages of price, quality and reliability so brilliantly conspicuous in the Absopure Frigerator represent the practical expression of 25 years' experience by famous refrigerating authorities.

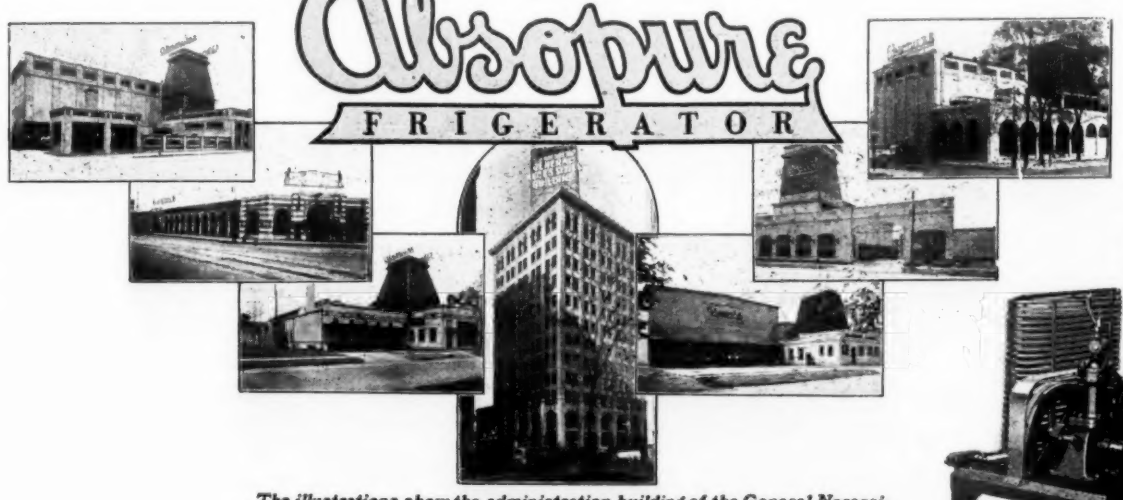
It is completely automatic, quiet running and practically free from service requirements. It is economical to buy, maintain and operate.

Back of the Absopure Frigerator is an organization built up in 25 years of continuous, successful refrigeration experience and comprises great resources in highly trained technical men, financial strength and physical equipment.

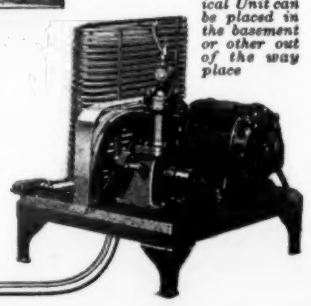
In materials, workmanship, and quality it is not surpassed by the costliest machines built. And because of the manufacturing economy of its design and the volume methods of production, it holds outstanding price advantage in every comparison.

*Some Valuable Franchises Are Open. Write or Wire*
GENERAL NECESSITIES CORPORATION, *Detroit, Michigan*

THE Absopure FRIGERATOR



*The illustrations show the administration building of the General Necessities Corporation and some of the 16 plants operated by this company.*



*The Absopure Frigerator Mechanical Unit can be placed in the basement or other out of the way place*

***Electrical men and women representing 140 Local Electrical Leagues gather at Association Island, Lake Ontario, near Henderson Harbor, New York***

# ATTENDED CAMP

***List of Conferees Attending Camp Co-operation VI Association Island, N. Y. Sept. 1-4, 1926***

*Note: S. E. D. indicates member of headquarters staff, The Society for Electrical Development*

| NAME | COMPANY | CITY |
|---|---|---|
| Adam, Mr. & Mrs. J. N. | The Hoover Co | Philadelphia, Pa. |
| Adams, Clifton | 201 Rathbon St. | Elmira, N. Y. |
| Aikman, J. R. | Winnipeg Hydro Electric System | Winnipeg, Man. |
| Alder, Mr. & Mrs. G. W. | Good Housekeeping Institute | New York, N. Y. |
| Alexander, Mr. & Mrs. H. W | | |
| Allcott, A. H. | Narragansett Elec. Lighting Co | Providence, R. I. |
| Anderson, Mr. & Mrs. Geo | The Niagara Falls Power Co. | Niagara Falls, N.Y. |
| Anderson, Betty | | |
| Ashworth, E. M. | Toronto Hydro Electric System | Toronto, Can. |
| Atkinson, A. L. | General Electric Co | Bridgeport, Conn. |
| Austen, G. W. | Electric Service League | Toronto, Can. |
| Badrian, Mr. & Mrs. B | S. E. D. | New York, N. Y. |
| Baker, H. A. | Baker-Howell Electric Co. | Rochester, N. Y. |
| Baker, L. M. | Turner Electric Co. | Elmira, N. Y. |
| Barnes, Mr. & Mrs. Cyrus | Charles H. Tenney & Co. | Boston, Mass. |
| Barnes, H. F. | Edison Lamp Wks. of G. E. Co | Harrison, N. J. |
| Barnes, R. C. | Main Street | Horseheads, N. Y. |
| Barry, Mr. & Mrs. J. G. | General Electric Company | Schenectady, N. Y. |
| Bates, C. A. | The Bryant Electric Co. | Bridgeport, Conn. |
| Beach, Mr. & Mrs. E. M. | Westinghouse Lamp Co. | New York, N. Y. |
| Beer, E. A. | S. E. D. | New York, N. Y. |
| Beil, E. J. | The Elec. League of Youngstown | Youngstown, O. |
| Birdsell, Mr. & Mrs. D. C. & Sons | Decorative Lamp & Shade Co | Philadelphia, Pa. |
| Blackwell, W. T. | Public Serv. Elec. & Gas Co. | Newark, N. J. |
| Bowe, Walter A | General Electric Co. | Schenectady, N. Y. |
| Boyle, Elizabeth | S. E. D. | New York, N. Y. |
| Brakman, Mr. & Mrs. A. L. | Brakman Electric Co. | Rochester, N. Y. |
| Brooks, Mr. & Mrs. H. A. | Potomac Electric Power Co. | Washington, D. C. |
| Bullen, Dana R. | General Electric Co. | Schenectady, N. Y. |
| Burnett, Mr. & Mrs. R. F. | Peoples Gas & Electric Co. | Oswego, N. Y. |
| Bush, Mr. & Mrs. A. L. | Belmont Electric Co. | New York, N. Y. |
| Caddigan, Mr. & Mrs. J. | The Edison Elec. Illg. Co.of Boston | Boston, Mass. |
| Caldwell, O. H. | Electrical Merchandising | New York, N. Y. |
| Campbell, Mr. & Mrs. W. H. | Servel Corporation | New York, N. Y. |
| Canada, W. J. | Nat. Fire Pro. Assn. | New York, N. Y. |
| Chantler, T. F. | S. E. D. | New York, N. Y. |
| Chase, Samuel A | Westinghouse Elec. & Mfg. Co. | Mansfield, O. |
| Chester, Valter | Walter Chester, Inc. | New York, N. Y. |
| Christine, Carl H | St. Louis Elec. Board of Trade | St. Louis, Mo. |
| Christopherson, Mr. & Mrs. N. C. | The Milwaukee El. Ry. & Lt. Co. | Milwaukee, Wis. |
| Clendenning, C. A. | Commissioner, City of Winnipeg. | Winnipeg, Can. |
| Cockrell, F. M. | S. E. D. | New York, N. Y. |
| Coles, Mr. & Mrs. Roswell | 76 Maiden Lane | Kingston, N. Y. |
| Collins, A. B. | Alabama Power Co. | Birmingham, Ala. |
| Connette, Mr. & Mrs. T. W. | Lockport Lt., Ht. & Pr. Co. | Lockport, N. Y. |
| Corby, H. F. | Toledo Edison Company | Toledo, Ohio |
| Corcoran, R. Bourke | The Electric Association | Chicago, Ill. |
| Crouse, J. Robert | The Cromaine Corporation | Cleveland, O. |
| Curran, Mr. & Mrs. M. A. | Graybar Electric Co., Inc. | New York, N. Y. |
| Day, Mr. & Mrs. J. T. | Malden Electric Co. | Malden, Mass. |
| Davidson, E. W. | S. E. D. | New York, N. Y. |
| Davis, Fred R | General Electric Co. | Schenectady, N. Y. |
| Davis, Mr. & Mrs. Laurence W. | Association of Electragists | New York, N. Y. |
| Dawson, H. E. | Electrical Lge. of Rd. Island | Providence, R. I. |
| Dederich, Robert M. | Cincinnati Electric Club | Cincinnati, O. |
| Dennis, Stanley A. | Electrical Record | New York, N. Y. |
| Disher, C. A. | Rex Electric, Inc. | New Orleans, La. |
| Doyle, W. H. | Central Hudson Gas & Elec | Newburgh, N. Y. |
| Drey, Walter | Forbes Magazine | New York, N. Y. |
| Duff, Mr. & Mrs. J. A. | Lockport Lt., Ht. & Pr. Co. | Lockport, N. Y. |
| Durban, G. E. | Delco-Light Company | Dayton, O. |
| Durfee, C. G. | S. E. D. | New York, N. Y. |
| Edkins, E. A. | Electric Shops | Chicago, Ill. |
| Emery, Mr. & Mrs. Loren | International Gen. Elec. Co. | Schenectady, N. Y. |
| Feiker, F. M. | S. E. D. | New York, N. Y. |
| Ferguson, Mr. & Mrs. J. G. | Ferguson Hdwe. & Elec., Inc | Rochester, N. Y. |
| Ferris, C. H. | Illuminating Glassware Gld. | New York, N. Y. |
| Finucane, Bernard E. | Rochester Elecl. Supply Co. | Rochester, N. Y. |
| Foster, George B. | Commonwealth Edison Co. | Chicago, Ill. |
| Gaffney, Mr. & Mrs. A. H. | American Plate Glass Co. | Kane, Pa. |
| Gale, Frank H. | General Electric Co | Schenectady, N. Y. |
| Geisbush, C. J. | Calif. St. Ass'n. of Electragists | Los Angeles, Calif. |
| Gibbs, Mr. & Mrs. L. D. | The Edison Elec. Illg. of Boston | Boston, Mass. |
| Gillinder, Mr. & Mrs. E. B. | Gillinder Brothers, Inc. | Port Jervis, N. Y. |
| Gilman, W. C. | Central Hudson G. & Elec. Co | Poughkeepsie, N.Y. |
| Gilpin, Mr. & Mrs. S. B. | General Electric Co | Philadelphia, Pa. |
| Gleason, Mr. T. | Gleason-Tiebout Glass Co | Brooklyn, N. Y. |
| Goodwin, Mr. & Mrs. W. L. | S. E. D. | New York, N. Y. |
| Gordon, Mr. & Mrs. R. A. | Blackstone Valley G. & El. Co | Pawtucket, R. I. |
| Graning, Mr. & Mrs. C. T. | Industrial Elec. Co., Inc. | Rochester, N. Y. |
| Graning, Edna | | Rochester, N. Y. |
| Hanna, Dr. M. J. | General Electric Co. | Baltimore, Md. |
| Harris, Mr. & Mrs. R. W | Servel Corporation of Boston | Boston, Mass. |
| Hartman, Mr. & Mrs. H. F. | 500 Lackawanna Ave. | Scranton, Pa. |
| Hatfield, Thomas F. | Hatfield Electric Co | Indianapolis, Ind. |
| Haulenbeek, J. H. | Kingston Gas & Electric Co | Kingston, N. Y. |
| Headrick, E. C. | Headrick Electric Co. | Denver, Colo. |
| Held, A. G. | 569 Cedar Wood Terrace | Rochester, N. Y. |
| Herman, L. Ruth | Nat. Lamp Works of G. E. Co | Cleveland, O. |
| Hodge, W. H. | Byllesby Eng. & Managem't Corp | Chicago, Ill. |
| Hogan, J. S. | The Minneapolis Gen. Elec. Co. | Minneapolis, Minn. |
| Horwitt, Frances R. | S. E. D. | New York, N. Y. |
| Houston, F. M. | Elmira Water, Lt. & R. R. Co. | Elmira, N. Y. |
| Hoyt, Mr. & Mrs. E. E. | Lockport Light, Heat & Power Co. | Lockport, N. Y. |
| Huber, Mr. & Mrs. Theo | T. R. Huber Electric Co., Inc | Rochester, N. Y. |

***(Continued on page 9)***

## Welcomes Competitor

When Hart Schaffner and Marx went into tailored women's wear, the Printz-Biederman Company, a direct competitor, ran advertisements of welcome in the trade papers. Their reason was that another high-grade manufacturer doing extensive creative advertising would promote the business to such an extent that their own advertising and their own business would be benefited by it. Advertising of one firm is invariably beneficial to the whole industry. The competitive concerns which have been joining in co-operative advertising have found the idea well worth the cost.

—From *System*, July, 1926

## H. G. Kobick to be Chicago District Manager of Kelvinator

H. G. Kobick, who has, for the past ten years, been assistant to E. A. Edkins, general manager of the Electric Shops, Commonwealth Edison Co., Chicago, will join the Kelvinator Corp., September 15, as district sales manager in Chicago.

## Harper Smyth to Direct Entertainment Program

Harper Smyth of the Domestic Electric Company, Cleveland, Ohio, will have charge of the sports and program of entertainment at the Waldenwoods Meeting of the Electric Refrigeration Council.

It is said by patent attorneys that approximately 6500 patents have been issued to inventors of refrigeration equipment. The Delco Light Company, manufacturers of Frigidaire, are reported to control about 1200 of these patents.

*OBJECTS OF CAMP CO-OPERATION*

*To promote organized thinking of co-operation among manufacturers, central stations, jobbers, contractors and retailers as a basis for business development as well as to provide the staff to work out such plans, are the broad purposes of The Society for Electrical Development. The Directors of the Society recognize the local electrical league as a practical instrument for putting such co-operative plans to work. This conference, Camp Co-operation VI., is the fifth held to forward both the philosophy and the practice of co-operative business building locally.*


# *What is the future of* Electric Refrigeration ?

ELECTRIC REFRIGERATION is about ten years old. The first nine years amounted to little, as far as the national market was concerned. The tenth year saw greater sales than all previous years combined.

The same was true of radio—a long period of slow progress, and then a rush that made millions. The same was true of the automobile.

Electric refrigeration is the only electric household appliance, outside of light, that appeals directly to the man as well as the woman. It is a basic comfort, and it is our belief that it will become a part of every home that makes any claims to convenience.

The dealer who now secures the franchise for a reliable electric refrigeration system, on a fair basis, will be in the same position as the dealer who secured an early franchise for a reliable automobile.

The Coldak Corporation, managed by the J. G. White Management Corporation, is now closing with dealers of the highest type. The Coldak System has been proved through six years of service in hundreds of homes. Service costs have been trifling. Volume production of household units, apartment house systems, and commercial machines is under way. Advertising to the consumer, in full-page and half-page newspaper space, has started in some cities and will be extended to others as rapidly as dealers are appointed.

COLDAK

COLDAK CORPORATION

Eight West Fortieth Street, New York City

*If you are in a position to represent Coldak with credit to yourself and to the Company, we have some interesting facts to place before you. The coupon is attached for your convenience.*

COLDAK CORPORATION
*8 West 40th Street*
New York City

Gentlemen: Please give me additional information about Coldak Electric Refrigeration, and your plans for distribution.

*Name*.....

*Street*.....

*City*..... State.....

## Attended Camp Co-operation VI

(*Continued from page 8*)

| | | |
|---|---|---|
| Janick, H. M. | | |
| Jaquet, G. E. | S. E. D. | New York, N. Y. |
| James, Charles E. | Lektrik Shop | Fort Pierce, Fla. |
| Jenkins, Mr. & Mrs. P. W. | Macbeth-Evans Glass Co. | Charleroi, Pa. |
| Jennings, Clyde | Electrical Goods, 239 W. 39th St | New York, N. Y. |
| Johnson, H. C. | 186 No. Clinton | Rochester, N. Y. |
| Johnson, Mr. & Mrs. O. P. B. | Indiana & Mich. Electric Co. | South Bend, Ind. |
| Jones, A. Lee H. | Canadian Gen. Electric Co., Ltd. | Montreal, Que. |
| Kinsman, Mr. & Mrs. C. F. | Sterling Bronze Company | New York, N. Y. |
| Kirkland, H. B. | S. E. D. | New York, N. Y. |
| Klopp, Benjamin | The Niagara Falls Power Co. | Niagara Falls, N.Y. |
| Labelle, P. R. | Shawinigan Water & Power Co. | Montreal, Que. |
| Laube, Mr. & Mrs. G. Fred | Laube Electric Corp. | Rochester, N. Y. |
| Lennon, Joseph O. | Ilg. Electric Ventilating Co. | New York, N. Y. |
| Littel, Laurene | Northern States Power Co. | Minneapolis, Minn. |
| Lloyd, M. H. | 309 Curtiss Building | Buffalo, N. Y. |
| Long, H. M. | Westinghouse Elec. & Mfg. Co. | Syracuse, N. Y. |
| Losby, T. L. | 352 Loeb Arcade | Minneapolis, Minn. |
| Lucas, Mr. & Mrs. Frank L. | Hansen Lucas DeFrance | Toledo, O. |
| MacMurchy, H. G. | Memphis Power & Light Co | Memphis, Tenn. |
| Malby, Fred J. | Winnipeg Hydro Electric System | Winnipeg, Man. |
| Marchmont, Mr. & Mrs. G. W. | Graybar Electric Co | Richmond, Va. |
| Matson, Mr. & Mrs. F. H. | Electrical League of St. Paul | St. Paul, Minn. |
| McAuliffe, Mr. & Mrs. J. E. | Triangle Conduit Co., Inc. | Brooklyn, N. Y. |
| McCall, Joseph B., Jr. | The Philadelphia Electric Co. | Philadelphia, Pa. |
| McIntyre, Kenneth A. | S. E. D. | New York, N. Y. |
| McKinley, Helen G. | Edison Lamp Wks. of G. E. Co. | Harrison, N. J. |
| McManis, T. J. | General Electric Co | Schenectady, N. Y. |
| McPhail, R. G. | Electrical League of Rochester | Rochester, N. Y. |
| McQuiston, J. C. | Westinghouse Elec. & Mfg. Co. | E. Pittsburgh, Pa. |
| Meilhop, Thomas P. | The Electric Association | Chicago, Ill. |
| Mickler, G. J. | Hydro-Elec. Pr. Comm. of Ont. | Toronto, Ont. |
| Miller, Arthur | Ivanhoe Div. of The Miller Co. | Cleveland, O. |
| Minkler, L. A. | Upper Hudson Elec. & R. R. Co. | Catskill, N. Y. |
| Moffat, L. E. | Electrical Merchandising | New York, N. Y. |
| Moore, Mr. & Mrs. Wallace | Electrical League of Rochester | Rochester, N. Y. |
| Morrison, George F. | General Electric Company | New York, N. Y. |
| Morrow, Merrill C. | Westinghouse Elec. & Mfg. Co. | Mansfield, O. |
| Muffat, Mr. & Mrs. E. L. | Electrical Exten Bur. of Detroit | Detroit, Mich. |
| Munger, Mr. & Mrs. G. D. | Hudson Valley Electrical League | Poughkeepsie, N.Y. |
| Neagle, Francis E. | Rounds, Dillingham, Mead & Neagle | New York, N. Y. |
| Neumuller, Mr.&Mrs. Ralph | The United Elec. Lt. & Pr. Co. | New York, N. Y. |
| Nichols, Mildred A. | Graybar Electric Co | New York, N. Y. |
| Nicholson, S. L. | Westinghouse Elec. & Mfg. Co. | New York, N. Y. |
| North, Jack | Cleveland Elec. Illg. Co | Cleveland, O. |
| Ormsbee, T. H. | The Outlook Company | New York, N. Y. |
| Payne, H. J. | S. E. D. | New York, N. Y. |
| Peck, M. M. | N. Y. Fire Ins. Rating Organ't'n | Kingston, N. Y. |
| Pendergraph, H. A. | Georgia Railway & Power Co | Atlanta, Ga. |
| Phillips, F. D. | Syracuse Electric League | Syracuse, N. Y. |
| Pollock, J. R. | N. Y. Telephone Co. | New York, N. Y. |
| Powell, Mr. & Mrs. A. L. | Edison Lamp Works of G. E. Co. | Harrison, N. J. |
| Powers, Mr. & Mrs. J. E. | 24 Kron Street | Rochester, N. Y. |
| Prosser, W. E. | Elec. League of the Niag. Front | Buffalo, N. Y. |
| Reese, Floyd H. | Elmira Water, Light & R. R. Co. | Elmira, N. Y. |
| Reichert, Mr. & Mrs. Geo. | Niagara Elec. Service Corp. | Niagara Falls, N.Y. |
| ReQua, W. A. | ReQua Electrical Supply Co | Rochester, N. Y. |
| Roeser, Mr. & Mrs. E. A. | Rochester Gas & Electric Corp. | Rochester, N. Y. |
| Rogers, Mr. & Mrs. H. G. | Edison Lamp Works of G. E. Co. | Harrison, N. J. |
| Rogers, Miss | | Harrison, N. J. |
| Rost, O. Fred | Newark Electrical Supply Co. | Newark, N. J. |
| Salmon, Maynard | 804 E. Water St. | Syracuse, N. Y. |
| Salomon, A. D. | S. E. D. | New York, N. Y. |
| Savage, J. W. | General Electric Co | Bridgeport, Conn. |
| Sawyer, Mr. & Mrs. L. P. | Nat. Lamp Works of G. E. Co. | New York, N. Y. |
| Sawyer, Joseph | | New York, N. Y. |
| Scott, Robert H. | Carter Electric Co. | Atlanta, Ga. |
| Seitz, Don | The Outlook Co. | New York, N. Y. |
| Shaw, Charlotte | | Detroit, Mich. |
| Shaw, Mr. & Mrs. Harold | Electrical Exten. Bur. of Detroit | Detroit, Mich. |
| Siegwath, George | Electric League of Pittsburgh | Pittsburgh, Pa. |
| Small, O. C. | S. E. D. | New York, N. Y. |
| Smieton, Mr. & Mrs. J., Jr. | S. E. D. | New York, N. Y. |
| Smith, Albert H | Pub. Serv. Co. of Nor. Illinois | Chicago, Ill. |
| Smith, Mr. & Mrs. A. L. | Walker & Pratt Mfg. Co | Boston, Mass. |
| Smith, Fred H. | Worcester Electric Light Co | Worcester, Mass. |
| Smith, Mr. & Mrs. Fred R. | 507 Linden St. | Scranton, Pa. |
| Smith, Harvey N | Syracuse Elec. League, Inc. | Syracuse, N. Y. |
| Smith, Helen | Rochester Gas & Elec. Corp | Rochester, N. Y. |
| Smith, J. O. | Radio Corp. of America | New York, N. Y. |
| Smith, Mr. & Mrs. S. Fred | Salem Electric Lighting Co. | Salem, Mass. |
| Smock, F. H. | Virginia Public Service Co. | Charlottesville, Va. |
| Souder, L. T. | Elec. League of Wash., D. C. | Washington, D. C. |
| Sovik, R. A. | Hudson Gas & Electric Co | Poughkeepsie, N.Y. |
| Spitzer, Gertrude | S. E. D. | New York, N. Y. |
| Stall, A. W. | Kingston Gas & Electric Co | Kingston, N. Y. |
| Stanley, Dr. Louise | U. S. Dept. of Agriculture | Washington, D. C. |
| Stewart, A. W. J. | Toronto Hydro Electric System | Toronto, Ont. |
| Strauss, L. L. | Viking Products Corp. | New York, N. Y. |
| Taylor, Mr. & Mrs. E. L. | Electrical League of Nor. Illinois | Chicago, Ill. |
| Test, Russell L. | Macbeth-Evans Glass Co. | Charleroi, Pa. |
| Thomas, Mrs. F. W. | | Troy, N. Y. |
| Thomas, W. M. | Seperal Corp., 2 Collins Ave. | Troy, N. Y. |
| Thomson, Mr. & Mrs. P. L. | Western Electric Company | New York, N. Y. |
| Thurman, W. L. | Southwestern Electric Co. | Chattanooga, Tenn. |
| Tollner, Mr. & Mrs. Hugo | Tollner Electric Co | Brooklyn, N. Y. |
| Trumbull, Glen R. | Gen. Eng. & Mang. Corp | New York, N. Y. |
| Turner, A. S., Jr. | Edison Lamp Works of G. E. Co. | Harrison, N. J. |
| Tuteur, Irving M. | McJunkin Advertising Co. | Chicago, Ill. |
| Van Aernam, Mr. & Mrs. J. F. | Electric League of Pittsburgh | Pittsburgh, Pa. |
| Van Boem, P. S. | Viking Products Corp | New York, N. Y. |
| Venable, I. B. | Electrical Contractor | Poughkeepsie, N.Y. |
| Vogt, Mr. & Mrs. F. Sherman | The Electric Club of Louisville | Louisville, Ky. |
| Von der Au, Catherine L. | S. E. D. | New York, N. Y. |
| Wagner, H. L. | Lockport Lt., Ht. & Power Co. | Lockport, N. Y. |
| Walsh, L. L. | Stenotype Operator | New York, N. Y. |
| Wallace, H. F. | Edison Lamp Works of G. E. Co. | Boston, Mass. |
| Warden, H. N. | 381 Main St. | Catskill, N. Y. |
| Waterbury, J. H. | Electl. League of the Tri-Cities | Rock Island, Ill. |
| Watts, Mr. & Mrs. F. E. | Electrical Goods, 239 W. 39th St. | New York, N. Y. |
| Weaver, Norwood | 350 Madison Ave. | New York, N. Y. |
| Webber, C. Reid | Grand Rapids Electric Club | Grd. Rapids, Mich. |
| Wehle, E. C. | 240 W. Water St. | Elmira, N. Y. |
| Weston, G. W. | Kansas City Electric Club | Kansas City, Mo. |
| Wetherbie, J. O. | General Electric Co | Bridgeport, Conn. |
| Wheeler, Mr. & Mrs. C. | Wheeler Green Elec. Co | Rochester, N. Y. |
| White, Charles | Electrical Contractor | Paterson, N. J. |
| Whitehorne, E. E. | Electrical World | New York, N. Y. |
| Whitehouse, Orville M. | Cent. Hudson Gas & Elec. Co. | Poughkeepsie, N.Y. |
| Wickham, D. R. | Schenectady Electric League | Schenectady, N. Y. |
| Wilder, Mr. & Mrs. E. L. and Children | Rochester Gas & Elec. Corp. | Rochester, N. Y. |
| Ziegenbein, H. L. | Consumers Power Co. | Jackson, Mich. |
| Zindle, R. | S. E. D. | New York, N. Y. |

# COST OF INQUIRIES CUT BY BOOKLET

## Combined Catalog Eliminates Curiosity Seekers

"The Leading Makes of Electric Refrigerators for Household and Commercial Use," an authoritative, unbiased review written in non-technical language, is now being prepared as a service to prospects and for co-operative use by local organizations.

This booklet is a new and very unusual type of co-operative literature. In it will be illustrated and described the electric refrigerators being manufactured by all the member companies of the Society for Electrical Development. It will also contain an introduction explaining the important facts about electric refrigeration, and will be, in effect, a condensed catalog of the leading makes now on the market. This booklet will be advertised in magazines and newspapers and offered postpaid at 30 cents per copy.

### Uninformed Prospects Fear Pressure of Salesmen

An experimental operation already carried out in connection with oil burners has shown that a booklet of this kind meets a real need. Thousands of people have become interested in these appliances, but only have a vague idea of the different makes on the market and how to go about making a selection. They are frequently confused by the conflicting claims of different manufacturers and are at a loss to know how to get the information they desire before making a purchase which involves an expenditure of several hundred dollars. Furthermore, they hesitate to make a systematic study of the different makes by answering various advertisements since this tends to involve them with high-pressure salesmen before they are in a position to make a decision.

The booklet is intended to bridge the gap between casual and active interest. It has been found that thousands of prospects will gladly pay for a booklet of this kind, advertised by a neutral organization, in which specific assurance is given that "there will be no follow-up by salesmen." On obtaining the book the prospect is able to compare one machine with another since the data on each machine is presented the same way. Exaggerated or questionable claims are not permitted since the text is carefully edited by the Society.

### Gives Buyer Confidence to Make Purchase

The booklet turns the casual prospect into an *intelligent buyer* and gives him a feeling of confidence in approaching the actual purchase of a machine. In the back of each booklet a blank is enclosed which enables the reader to request additional literature from the manufacturers whose names are selected. Experience shows that, having read the booklet, the prospect selects three or four manufacturers and sends in a request for additional literature, with an invitation to the salesman to call. The salesman is then enabled to approach the prospect in a frame of mind to discuss the actual purchase of a refrigerator.

It has been found that with ordinary advertising the cost of consumer inquiries is considerable, averaging $20.00 to $30.00 each. Since many of these inquirers are curiosity seekers and booklet collectors, the actual sales resulting from the follow-up usually bring the unit cost up to a very high figure. In the case of the booklet described, the inquirer must pay 30 cents per copy for it, which indicates a definite interest. It has been found that these inquiries can be obtained at a cost less than $1.00 each, and the percentage of resultant sales is very high.

### May be Featured in Local Co-operative Advertising

This booklet will be a unique addition to the electric refrigeration program and one which should be extremely effective in getting actual results. A small electro, illustrating and describing the booklet, may be obtained for insertion in local newspaper advertisements, by addressing The Society for Electrical Development.

# Salesmen Work Inside, Then Follow-up Leads

Electric refrigerator salesmen for the Electric Shops of the Commonwealth Edison Co., Chicago, work inside the store one or two days and then go out to follow the leads they have secured. There is no distinction between inside and outside salesmen.

At the present time about 40 salesmen are devoting their time exclusively to electric refrigeration. Oliver R. Hogue is in charge of electric refrigeration sales.


Trade Marks AUTOMATIC SERVEL REFRIGERATION Reg. U. S. Pat. Off.

"SOLD and recommended by more electric light and power companies than any other electric refrigerator . . "

IN every Servel advertisement appearing in national magazines, this statement appears: "Sold and recommended by more electric light and power companies than any other electric refrigerator."

It is a significant fact, worth repeating many times, that public service companies, who have had an intimate part in the entire development of the electric refrigeration art, now endorse Servel.

Over 1,000 central station companies are now selling and recommending Servel. These include many of the largest and strongest companies and practically every state is represented.

These organizations promote the wide use of Servel as an important service to their customers. A money-saving service, because Servel refrigeration is usually cheaper than ice. A healthful service, because Servel refrigeration keeps food at an ideal temperature to retain its flavor and prevent the growth of bacteria. A highly profitable service for the company, for refrigeration load requires little or nothing in extra equipment.

And central stations with merchandise departments are in an ideal position to sell Servel—knowing where the best prospects can be found and having the confidence of their customers.

Executives of Electric Light and Power Companies are invited to write for more complete information.

THE SERVEL CORPORATION

6131-19 51 East 42nd Street, New York

CHICAGO BOSTON DETROIT MINNEAPOLIS SALT LAKE CITY DENVER ATLANTA SAN FRANCISCO LOS ANGELES SEATTLE DALLAS

*London, England, Servel, Ltd.*

*Factories: Evansville, Ind. Carteret, N. J. Newburgh, N. Y.*

# What the Public Wants to Know About Electric Refrigeration

## Survey in Chicago Suburbs Shows Great Popular Interest—Many Ask How it Works—Question First Cost and Upkeep

"What do you want to know about electric refrigeration?" This question asked by investigators who have called at dozens of homes in numerous suburbs of Chicago, homes of people moderately situated, as well as homes of wealth, has brought to light many pointed questions about electrical refrigeration which now retard the buying impulses of prospects.

Some of the questions are foolish, some amusing, all are interesting and valuable to advertising and sales executives who are constantly seeking to find effective methods of gaining the attention, interest, conviction and action of possible buyers.

Only a few of the interviews are published in this issue. Others will follow later. Names and addresses of the persons interviewed, and references to particular makes of machines, are deleted for obvious reasons.

### What Women Want to Know About Electric Refrigeration

*A-1 Mrs.*——

"What is the original cost and the upkeep? Will it stay cold? Will it stay the same temperature? What do you have to do to keep the engine running?"

*A-2 Mrs.*——

"I am interested in it, even if I can't afford one just now. It would relieve me so if I did not have to think of the iceman." Is there any way to buy one on time payments? Could I get any down on my old one? Why can't you buy a motor and have it installed in an old box?"

*A-3 Mrs.*——*Moderately well-to-do family.*

"I know that they are the best kind of refrigerators to have, but at the price that they now sell, no one could afford one—on an instructor's salary."

*A-4 Mrs.*——*Matron of a girls' house at University.*

"They are too expensive and I am not interested. I hear that they are very noisy and that the constant hum of the motor nearly drives one insane."

#### Is it Noisy?

*A-5 Mrs.*——*Wealthy. Very fine home.*

"Should I choose one with a built-in or basement motor? How long would it take to install the basement type? Do the men have to cut up the wall space much for the basement type? Are they noisy? Can they burn out the fuse easily? Will the power go off during storms?

*A-6 Mrs.*——*Lives in a beautiful, rented apartment.*

"Is it wise to buy now before the boxes have had every possible improvement made upon them? How do I know that they are really as good as they are said to be? I could have one put in on trial but if I didn't like it, there would be all that trouble for nothing. I'm afraid that my friends who say they are good would say that, even if they are dissatisfied, just because they don't want to appear stung on anything that they have spent so much money on."

#### Is it Difficult to Run?

*A-7 Mrs.*——*Huge old house.*

"Would I save enough in the long run to make it pay to invest so much in the original output? Would there have to be much repairing? Is it difficult to run? Is there ever danger of it stopping and the food spoiling?"

*A-8 Mrs.*——*Rented house. Six children.*

"Is it economical? Is it roomy? Is it noisy? Is it controlled with a thermostat so that it maintains an even temperature? Is there an automatic way of shutting it off, or does one have to shut it off and start it? If so, how often?"

#### Why Don't They Make More and Sell Them for Less?

*A-9 Mrs.*——*Home nicely furnished. Housekeeper in charge.*

"We haven't an electrical refrigerator, and we don't intend to get one as the family travels a lot and it would hardly pay to invest so much money in one, though anyone knows that it is the only thing to have. Why do the companies not make more of them and sell them for less? Would they not profit from such a plan in the long run,—because everyone who does not own one, hesitates on account of the initial expense only."

*A-10 Mrs.*——*Beautiful house. Maid and butler.*

"I haven't any now and I don't know when I can get one, though I would like one so that my house could be entirely modern and up-to-date. Though just now my maid can attend to the present icebox that I have. I think that I will wait till they improve more. I hear that if they are liked, that they are very well liked, and if they are disliked, they are equally as much disliked."

**G. M. DWELLEY**

**Sales Manager of the Kelvinator Corporation and Chairman of the Sales Committee, Electric Refrigeration Council.**

#### Interested in Sanitary Features

*A- 11 Mrs.*——*Moderate income. Three children.*

"The cost at the start is pretty much unless one can purchase on the installment plan. I hear that they are very convenient and very clean to have in a small place. But then one could put up with a lot of inconvenience for $295 or $345, you know unless at the end of the time, you have paid for your icebox by doing otherwise, and I hear they nearly pay for themselves in a few years. The sanitary part of the new boxes is what appeals to me, more than the saving of energy,—though *that* counts, too, of course."

*A-12 Mrs.*——*Rented house. Three small children.*

"I want one but I cannot afford one just now. My friends have them and all are very well pleased with them and say that they'd never go without one again. One friend put a motor in her icebox that she had in use for a long time. It didn't work out so very well because they never seemed to be able to regulate it correctly. The the box itself wore out and the motor was still good."

#### Do Chemicals Taint the Milk?

*A-13 Mrs.*——

"Is it noisy? Could the motor be placed in the basement? Does it maintain an even temperature? Do chemicals affect the food or taint milk? Does the refrigeration dry out foods? How much attention does it require? Do the coils corrode? How often should they be scraped? Can anyone do this or does the unit have to be taken apart and scraped by an expert? Are the parts expensive? What is the make of the motor? What is the cost installed? Cost of electricity per month? Total cost, including depreciation, more or less than taking ice?"

*A-14 Mrs.*——*House used for renters by the week or month.*

"I move around all of the time so I don't suppose that they have boxes small enough to make it pay to move along with us. Do they? Wouldn't the moving cost more than it is worth? Are they heavier than the old ones? Would they be hard to connect or do you do just as you do with a light?"

*A-15 Mrs.*——*Rented home, but of fairly good income, to judge from the refined surroundings.*

"I haven't one now but just as soon as we move into our own home, we are going to buy one. I have been discussing them with my friends who have them. Everyone says that they can't get along without them after they have once used one. All of my neighbors say that they are as necessary as electric lights or washers. There is no dirt, no noise from the iceman. . . only satisfaction. It seems that they used to be considered a luxury before for only the wealthy people, but now, even the moderately situated people can have them if they arrange the first output."

#### Can You Get Anything for the Old Box?

*A-16 Mrs.*——*Very fine home. Extraordinary furnishings.*

"I haven't one just now but I am going to get one as soon as I decide on the kind to get. I consider one as necessary as electric lights. It makes toward a more convenient and sanitary kitchen. My sister owns one and wouldn't get along without one. My other sister installed a motor in an old box, but I hear that this does not work out so well, probably because it has not been regulated correctly or something. But the coils seem to be covered with a slush instead of the ice. This slush runs down in the food and it isn't very nice. Can you get any down on an old box if you do not want to install a motor in an old box?"

## McGraw Awards Recognize Meritorious Service

Judges appointed to administer the "McGraw Awards for Electrical Men" are now considering the second presentation of the medal, purse and certificates in the four fields honored each year. The service of J. Robert Crouse, in organizing the Electric Refrigeration Council, was selected by the Committee of Awards as the outstanding contribution to the industry in the field of co-operation during 1925, and Mr. Crouse was given public recognition at a dinner meeting arranged by the Directors of the Society for Electrical Development in January of this year. The presentation of the medal and purse of $100 in gold was accompanied by the following citation:

### Crouse Citation

"*J. Robert Crouse*, president Nizer Corporation, Detroit, called the 'father of co-operation in the electrical industry' and founder and director of the Society for Electrical Development, for twenty years has been the outstanding exponent of the principle that electrical men should work together for the up-building of the electrical market and the promotion of the idea of 'doing it electrically.' Beginning in the vision of a co-operative publicity program for the lighting industry, his conception gradually expanded until it embraced the entire scope of electric service and the broad purpose of increasing human happiness by relieving drudgery both in industry and in the home. Under his inspiring leadership and through the sheer force of his engaging personality and his unflagging zeal, this, his dream of early days, has gradually influenced the thinking and the spirit of electrical men until it has effected a degree of co-operative achievement unparalleled in any other industry.

"It was through his initiative that 'Camp Co-operation I' was held at Association Island in 1912, which was the first conference of the foremost men of all branches of the electrical industry to discuss the possibilities of co-operation in market development, and out of this meeting came the organization of the Society for Electrical Development. Despite his retirement from the electrical industry for a number of years, his interest in the furthering of co-operation for upbuilding the electrical market never diminished, and his dynamic enthusiasm continued to win new converts and carry the movement forward. With his return to the electrical industry comes the most notable recent example of his progressive leadership, in the organization of the manufacturers of electric refrigerators into a council that, almost at the birth of this new and rapidly expanding branch of the industry, has established a high standard of harmony of purpose and a co-ordinated program of creative selling that is bringing great impulse to the development of this vital service to the American home."

In addition to the medal for co-operation attention is called to the three additional presentations which offer opportunity to individuals in the electric refrigeration branch of the industry to receive recognition for achievements in the interest of the electrical industry and the public, namely: the Manufacturers' Medal, the Jobbers' Medal and the Contractor-Dealers' Medal The Committee of Awards consists of the following: W. W. Freeman, president, Union Gas & Electric Co., Cincinnati, Ohio; H. B. Crouse, president, Crouse-Hinds Co., Syracuse, N. Y.; W. E. Robertson, vice-president, Robertson Cataract Electric Co., Buffalo, N. Y.; L. K. Comstock, president, L. K. Comstock & Co., New York; F. M. Feiker, operating vice-president, The Society for Electrical Development; and Earl E. Whitehorne, commercial editor, *Electrical World*.

## Raw Materials Used in Large Quantities

Guides conducting visitors through the plant of the Kelvinator Corporation, Detroit, give some startling figures regarding the materials which will be used in the manufacture of Kelvinators this year: 363,500 pounds of lead, 140,000 pounds of tin, 4,700,000 pounds of cast iron, 65,000 gallons of Japan, 3,500,000 pounds of steel, 600,000 pounds of sulphur dioxide, 33,500 gallons of oil, 5,200,000 screws, 1,700,000 nuts, 12,500 pounds of nails, 1,600,000 square feet of ply wood, 72,000 pounds of rubber, 242,000 pounds of calcium chloride, 32,000 pounds of Bakelite, 320,000 board feet of lumber, are among the items which enter into the mass production operations.

## CLASSIFIED COLUMN

### HELP WANTED

**DISTRICT MANAGER**

*By* Refrigeration Manufacturer

The executive selected will have had experience in selling electrical refrigeration. He must have exceptional sales ability, be a good picker of men and know how to train and direct the efforts of high grade commission salesmen. His experience should embrace both dealer and house to house selling. The salary plus over-riding and bonus will attract best types of executive. Company well established—strong financially and known to the public through its big advertising. Location New York, Chicago, St. Louis and Atlanta. Replies will be known to only two men and treated in strictest confidence. No references investigated until permission given. State where employed now, age, present earnings and telephone number.
—Box No. 1, Electric Refrigeration News.

**WANTED**

Photographs and descriptive stories of original window displays of electrical refrigerators, store exhibits and demonstrations, portable and community exhibits, for publication in ELECTRIC REFRIGERATION NEWS. Suitable payment will be made for all material used. Address: Electric Refrigeration News, 818 West Hancock Street, Detroit, Mich.

**DEALER FRANCHISE WANTED**

Established dealer in automobile and electrical supplies in Minneapolis, desires to connect with manufacturer of electrical refrigerators, desiring to establish sales agency. Box No. 2, Electric Refrigeration News.

**WANTED: ELECTRICAL REFRIGERATOR FOR SMALL POWER BOATS**

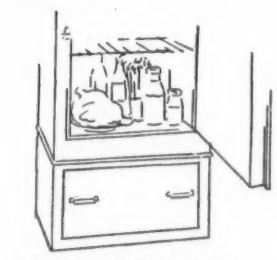
Contact desired with manufacturer of electrical refrigerators suitable for installation on small power boats, ranging in size from 25 feet upward, and that may be adapted to connect with electrical lighting equipment regularly installed. Address: Electric Refrigeration News, Box No. 3.

"What is it that will send a job looking for you? It is the excellence of the work you are doing. It's superiority over what some other man can do in the same place. It will at least help retain your present job and by careful thought and study may send you far above it.—C. H. Leonard."


*A new model complete electric refrigerator at $215 Revolutionary in design— in service—in price*

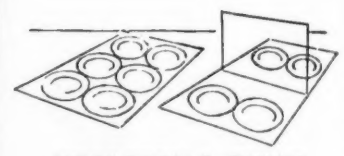
**FIVE MINUTE SERVICE**

Should attention be required the Copeland service man or the janitor merely lifts the unit out and substitutes a loaned unit in almost the same length of time that it takes to fill the average refrigerator with ice.



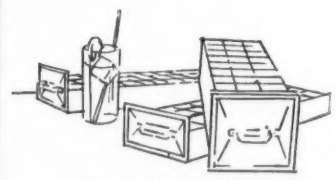
**STORAGE DRAWER**

The large vegetable or storage drawer is a convenient accessory. When in position, under the refrigerator, the food compartment is raised twelve inches.



**MORE ROOM *for* DISHES**

On the left, the wide, unobstructed Copeland shelf, holding six dishes. On the right, two narrow shelves of an ordinary refrigerator which, because of the partition, hold only four dishes.



**MORE ICE CUBES**

More ice — 108 cubes can be frozen at one time. The double depth drawer is also used for delicious frozen desserts, salads and bouillon.

COPELAND
ELECTRIC REFRIGERATION

The radically different design of the new model Copeland Electric Refrigerators, with both machine and cooling compartment forming a single removable unit at the top of the box, makes possible better refrigeration, greatly increased food space, a larger number of ice cubes, simple installation and "five-minute" service.

Measuring only 26¼ inches in width, 21 inches in depth and 62½ inches in height, the new model Copeland requires very little floor space. Yet the commodious, unpartitioned food chamber, with wide, unobstructed shelves, affords ample storage space for the average size family. Built of the finest sheet steel, insulated with solid corkboard and finished in white Pyroxylin, it maintains, throughout, the same high standard of quality that characterizes thousands of other Copeland models giving satisfactory service in American homes today.

The retail price of the new model Copeland is lower than that of any other complete electric refrigerator.

We shall be pleased to quote quantity prices and to furnish detailed specifications.

*There is a complete Copeland for every home or a Copeland unit can be installed in refrigerators now in use*

COPELAND PRODUCTS INC · 630 LYCASTE STREET · DETROIT, MICHIGAN